(2)

Supreme Court, U.S.
FILED

No. 97-1417 FEB 27 1998

IN THE OFFICE OF THE CLERK

Supreme Court of The United States

OCTOBER TERM, 1997

ALTAI, INC.,

Petitioner,

v.

COMPUTER ASSOCIATES INTERNATIONAL, INC.,

Respondent.

Petition for a Writ of Certiorari to the United States Court of Appeals for the Second Circuit

---

APPENDIX TO THE PETITION FOR WRIT OF CERTIORARI

Of Counsel:

CHARLES ALAN WRIGHT
727 East Dean Keeton Street
Austin, Texas 78705
(512) 471-7188

MARC M. ARKIN
140 West 62nd Street
New York, New York 10023
(212) 636-6850

DAVID G. POST
1719 North Broad Street
Philadelphia, PA 19122
(215) 204-4539

SUSAN G. BRADEN
Counsel of Record
Baker & McKenzie
815 Connecticut Avenue, N.W.
Washington, D.C. 20006
(202) 452-7075
Counsel for Petitioner

LARRY S. FREEDMAN
Platinum *technology, inc.*
1815 South Meyers Road
Oakbrook Terrace, Illinois 60181

Balmar Legal Publishing Services, Washington, D.C., (202) 682-9800

254 PP

TABLE OF CONTENTS

Page

DECISIONS OF THE COURTS BELOW:

Computer Assocs. Int'l, Inc. v. Altai, Inc., 126 F.3d 365 (2d Cir. 1997) 1a

Computer Assocs. Int'l, Inc. v. Altai, Inc., 950 F. Supp. 48 (E.D.N.Y. 1996) 17a

Computer Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693 (2d Cir. 1992) 31a

Computer Assocs. Int'l, Inc. v. Altai, Inc., 775 F. Supp. 544 (E.D.N.Y. 1991) 88a

ORDERS OF THE COURTS BELOW:

Computer Assocs. Int'l, Inc. v. Altai, Inc., No. 96-7875 (2d Cir. Dec. 10, 1997) (order denying rehearing and hearing *en banc*) ... 150a

Computer Assocs. Int'l, Inc. v. Altai, Inc., No. 96-7875 (2d Cir. Dec. 15, 1997) (order issuing mandate) 151a

Computer Assocs. Int'l, Inc. v. Altai, Inc., No. 96-7875 (2d Cir. Mar. 12, 1997) (order inviting posthearing briefs directed to the question "whether and to what extent the Berne Convention affects the ability of a United States federal court to issue the anti-suit injunction requested by Altai in this case") 153a

Computer Assocs. Int'l, Inc. v. Altai, Inc., No. 93-7957 (2d Cir. Apr. 3, 1996) (summary order affirming judgment of the district court in *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 832 F. Supp. 50 (E.D.N.Y. 1993) and issuing mandate). 154a

Page

Computer Assocs. Int'l, Inc. v. Altai, Inc.,

No. 91-7893, 91-7935 (2nd Cir. Jan. 8, 1993) (Apostille and certification that the Second Circuit's Dec. 22, 1992 judgment was final in *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693 (2d Cir. 1992) and issuing mandate)..... 160a

Computer Assocs. Int'l, Inc. v. Altai, Inc.,

No. 89-0811 (E.D.N.Y. Aug. 12, 1991) (order entering judgment in favor of plaintiff *Computer Associates International, Inc.* regarding copyright-infringement claims as to OSCAR 3.4, but entering judgment in favor of defendant Altai, Inc. regarding copyright-infringement claims as to OSCAR 3.5) 166a

STATUTORY PROVISION INVOLVED

Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, 102 Stat. 2853 (1988) 168a

OPINION OF THE TRIBUNAL DE COMMERCE, BOBIGNY, FRANCE

Computer Assocs. Int'l, Inc. v. FASTER S.A.R.L. and Altai, Inc., No. 519/95 (Tribunal De Commerce De Bobigny, France, Jan. 20, 1995) (decision and order that OSCAR 3.5 did not violate French copyright law) s

Translation in English 183a

Original in French 216a

COMPUTER ASSOCIATES INTERNATIONAL, INC.,
Plaintiff – Appellee,

v.

ALTAI, INC., Defendant – Appellant.

No. 1071, Docket 96 – 7875.

United States Court of Appeals,
Second Circuit.

Argued March 3, 1997.

Decided Sept. 25, 1997.

Owner of copyrighted computer program brought action alleging copyright infringement and trade secret misappropriation against competitor. The District Court, 775 F.Supp. 544, held that one of competitor's computer programs was infringing, that second program was not infringing, and that Copyright Act preempted state law trade secret claim. The Court of Appeals affirmed copyright infringement ruling but vacated preemption ruling and remanded, 982 F.2d 693. On remand, the District Court held that trade secret claim was time-barred because discovery rule did not apply to toll limitations period for that claim, 832 F.Supp. 50. On appeal, the Court of Appeals certified question regarding applicability of discovery rule, 22 F.3d 32. The Supreme Court of Texas, 918 S.W.2d 453, answered question, finding that discovery rule did not apply to trade secret claim. The Court of Appeals then issued mandate and affirmed District Court decision that dismissed that claim, 61 F.3d 6. Competitor then sought to enjoin owner from pursuing copyright infringement action instituted against competitor in France. The United States District Court for the Eastern District of New York, Dennis R. Hurley, J., 950 F.Supp. 48, denied relief, and competitor appealed. The Court of Appeals, John M. Walker, Jr., Circuit Judge, held that res judicata and collateral estoppel did not bar French action.

Affirmed.

1. Federal Courts

Court of Appeals reviews district court's application of principles of res judicata and collateral estoppel de novo, accepting all factual findings of district court unless clearly erroneous.

2. Judgment

Res judicata did not bar owner of copyrighted computer program from litigating its French copyright infringement action against competitor and competitor's French distributor after owner lost copyright infringement action against competitor in United States, where infringing conduct which formed basis of French action occurred after filing of United States action, and United States court lacked personal jurisdiction over French distributor.

3. Judgment

Under doctrine of "res judicata" final judgment on merits of action precludes parties or their privies from relitigating issues that were or could have been raised in the action.

See publication Words and Phrases for other judicial constructions and definitions.

4. Judgment

Res judicata bars subsequent litigation of any claims arising from transaction or series of transactions which was subject to prior suit. Restatement (Second) of Judgment § § 24(b), 24 comment.

5. Judgment

Burden is on party seeking to invoke res judicata to prove that doctrine bars second action.

6. Judgment

For purposes of res judicata, scope of litigation is framed by complaint at time it is filed.

7. Judgment

Res judicata doctrine does not apply to any rights acquired during action which might have been, but which were not, litigated.

8. Federal Civil Procedure

Although plaintiff may seek leave to file supplemental pleading to assert new claim based on actionable conduct which defendant engaged in after lawsuit is commenced, plaintiff is not required to do so. Fed.Rules Civ.Proc.Rule 15(c), 28 U.S.C.A.

9. Judgment

Res judicata will not apply where initial forum did not have power to award full measure of relief sought in later litigation.

10. Judgment

Even where second action arises from some of same factual circumstances that give rise to prior action, res judicata is inapplicable if formal jurisdiction or statutory barriers precluded plaintiff from asserting its claim in first action. Restatement (Second) of Judgments § 26(1)(c) comment.

11. Constitutional Law
Federal Courts

Exercise of jurisdiction is proper if defendant has sufficient contacts to satisfy state long-arm statute and due process clause of Fourteenth Amendment. U.S.C.A. Const.Amend. 14.

12. Copyrights and Intellectual Property

French distributor's agreement with American corporation in which it agreed to arbitration in Texas did not give distributor necessary minimum contacts with New York sufficient to support exercise of personal jurisdiction over it in New York copyright infringement action. U.S.C.A. Const.Amend. 14.

13. Judgment

After owner of copyrighted computer program lost copyright infringement action against competitor in United States, collateral estoppel did not bar owner from claiming that competitor's program infringed its French copyright in French copyright infringement action, absent showing that copyright standards in France and United States were "identical."

14. Judgment

For collateral estoppel to apply, issues in each action must be identical, and issues are not identical when legal standards governing their resolution are significantly different.

15. Injunction

Federal court has power to enjoin foreign suit by person subject to its jurisdiction; however, due regard for principles of international comity require that this power should be used sparingly.

16. Injunction

Antisuit injunction should be granted only with care and great restraint; ordinarily, when courts of two sovereigns have in personam jurisdiction, one court will not try to restrain proceedings before the other.

17. Injunction

In determining whether to enjoin foreign litigation, court must consider, as threshold matter, whether parties to both suits are the same and resolution of case before enjoining court would be dispositive of action to be enjoined.

18. Injunction

Enjoining French copyright infringement action was not necessary to protect jurisdiction of United States courts or integrity of federal judgment in copyright infringement action involving same parties, where French action involved violations of French copyright.

Susan G. Braden, Ingersoll & Bloch, Washington, DC, for Defendant-Appellant.

Stephen D. Kahn (Kenneth R. Parks, Peter Tu, Weil, Gotshal & Manges LLP, New York City, Michael A. McElroy, Computer Associates International, Inc., on the brief), for Plaintiff-Appellee.

Before: WALKER, McLAUGHLIN, Circuit Judges, and CHIN,* District Judge.

JOHN M. WALKER, Jr., Circuit Judge:

Defendant-appellant, Altai, Inc. ("Altai"), appeals from the order of the United States District Court for the Eastern District of New York (Dennis R. Hurley, *District Judge*) denying its motion for an injunction against Computer Associates International, Inc. ("Computer Associates"). The issue on appeal is whether, under a theory of either claim or issue preclusion, a federal court should enjoin Computer Associates from pursuing an action claiming copyright infringement of a computer program in a French forum where Computer Associates has previously brought and lost a United States copyright infringement action based on the same computer program in federal court. Because we agree with the district court that *res judicata* and collateral estoppel are inapplicable under the circumstances of this case, we affirm.

I. BACKGROUND

A. The United States Action

In August of 1988, Computer Associates brought a copyright infringement and trade secrets misappropriation action in the Eastern Distinct of New York against Altai,

---

* The Honorable Denny Chin of the United States District Court of the Southern District of New York, sitting by designation.

alleging that Altai had copied substantial portions of Computer Associates's ADAPTER computer program into Altai's OSCAR 3.4 and OSCAR 3.5 computer programs in violation of Computer Associates's United States copyright (the "United States action"). On August 9, 1991, following a trial, the district court found that Altai's OSCAR 3.4 computer program infringed Computer Associates's copyright, but held that OSCAR 3.5 was not substantially similar to the ADAPTER portion of Computer Associates's SCHEDULER program and therefore did not infringe Computer Associates's copyright. *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 775 F.Supp. 544, 560-62 (E.D.N.Y.1991) *("Altai I")*. The district court dismissed Computer Associates's trade secrets claim as preempted by the federal Copyright Act. *Id.* at 565.

On December 17, 1992, the Second Circuit affirmed the district court's findings and judgment with regards to Computer Associates's copyright claims, but vacated the district court's preemption holding. *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F2d 693, 715, 720 (2d Cir.1992) ("*Altai II*"). On remand, the district court held that the trade secret claim was barred under Texas's two-year statute of limitations. *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 832 F.Supp. 50, 54 (E.D.N.Y.1993) ("*Altai III*"). Computer Associates appealed and the Second Circuit certified the issue to the Texas Supreme Court. *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 22 F.3d 32, 37 (2d Cir.1994) ("*Altai IV*"). On July 17, 1995, following a decision by the Texas Supreme Court, the Second Circuit issued a mandate affirming the district court's decision dismissing Computer Associates's trade secret claim. *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 61 F.3d 6, 8 (2d Cir.1995) (per curiam) ("*Altai V*").

B. The French Action

On January 23, 1990, Computer Associates and L'Agence pour la Protection des Programmes ("L'Agence") secured an *ex parte* order from the President of the Tribunal de Grande Instance in Bobigny, France, authorizing seizure of computer

programs and business records from the offices of Altai's French distributor, la Societe FASTER, S.A.R.L. ("FASTER"), and enjoining FASTER from distributing or marketing its products. On February 2, 1990, a raid of FASTER's offices yielded five object code tapes of Altai software that contained OSCAR 3.5 code.

On February 15, 1990, one month before trial commenced in the United States, Computer Associates and L'Agence filed an action in the Tribunal de Commerce in Bobigny, France (the "Commercial Court"), against Altai and FASTER, charging violations of Computer Associates's French copyright (the "French action"). The French action centered on Computer Associates's allegations that Altai's importation and FASTER's distribution of OSCAR 3.5 in France violated Computer Associates's French copyright.

On October 1, 1991, Altai brought to the Commercial Court's attention the district court's holding in *Altai I* that its OSCAR 3.5 computer program did not violate Computer Associates's United States copyright and of the status of Computer Associates's appeal to the Second Circuit. Trial in the French action was postponed until September 10, 1992.

On September 16, 1992, Altai requested a stay of the French proceeding from the Tribunal de Grande Instance in Paris (the "Tribunal"), pending disposition of Altai's request for an *exequatur*, which would make the judgment in *Altai I* enforceable in France and allow Altai to introduce the judgment during the course of the French action in the Commercial Court. On October 22, 1992, the Commercial Court issued a stay. The *exequatur* was issued by the Tribunal in June 1993.

On May 14, 1994, Computer Associates moved to resume the French proceedings, and on November 25, 1994, trial in the Commercial Court began. On January 20, 1995, the Commercial Court found that Altai's OSCAR 3.5 program did not violate Computer Associates's rights under French copyright law. The Commercial Court specifically rejected Altai's argument that the United States decision in *Altai I*

governed the disposition of the French action. The Commercial Court stated:

> [T]he United States decision was made with reference to United States law which, even if it is close to French law with regard to the protection of literary and artistic works, cannot be completely and immediately identified with French law without an analysis of the facts under French law. Jurisprudence on the matter of software protection is in flux, as the United States decision shows, with each case having to be considered individually. . . .

On April 25, 1995, Computer Associates appealed the decision to the Paris Court of Appeals which scheduled briefing for May 13, 1998, and oral argument for June 18, 1998. Letter from Susan G. Braden, Counsel for Altai, Inc. to panel 1 (May 15, 1997).

C. Motion To Enjoin French Copyright Infringement Action

On November 16, 1994, Altai moved in the Eastern District of New York to enjoin Computer Associates from continuing to litigate the action in France. On February 22, 1995, in light of the January 20, 1995 decision of the Commercial Court in its favor, Altai voluntarily withdrew this motion.

On April 11, 1995, after learning of Computer Associates's plan to appeal the decision of the Commercial Court, Altai reactivated its motion to enjoin Computer Associates from continuing to proceed with its French action. On June 17, 1996, the district court denied Altai's motion to enjoin Computer Associates from pursuing its French action. *Computer Assocs Int'l, Inc. v. Altai, Inc.*, 950 F.Supp. 48, 54 (E.D.N.Y.1996) ("*Altai VI*"). This appeal followed.

II. DISCUSSION

On appeal, Altai contends: (i) that Computer Associates's United States action for violation of its United States copyright precludes, under the doctrine of *res judicata*, its French action

for violation of its French copyright; (ii) that, alternatively, Computer Associates is collaterally estopped from claiming that OSCAR 3.5 violates its French copyright because, in the United States action, judgment was rendered to the effect that OSCAR 3.5 does not violate Computer Associates's United States copyright; and (iii) finally, an antisuit injunction is appropriate, because comity concerns which caution against enjoining parties to a parallel foreign proceeding are inapplicable when, as here, judgment has already been rendered in the United States action. We address each contention in turn.

[1] We review a district court's application of the principles of *res judicata* and collateral estoppel *de novo*, see *Valley Disposal, Inc. v. Central Vt. Solid Waste Management Dist.*, 31 F.3d 89, 93 (2d Cir.1994); *Manning v. City of Auburn*, 953 F.2d 1355, 1358 (11th Cir.1992), accepting all factual findings of the district court unless clearly erroneous, *see Kaepa, Inc. v. Achilles Corp.*, 76 F.3d 624, 626 (5th Cir.1996).

A. Res Judicata

[2] Altai argues that the doctrine of *res judicata* bars Computer Associates from litigating its French action because Computer Associates could have raised its French copyright claims during the course of its United States action on its United States copyright claims. We disagree.

[3, 4] Under the doctrine of *res judicata*, a final judgment on the merits in an action "precludes the parties or their privies from relitigating issues that were or could have been raised in that action." *Federated Dep't Stores, Inc. v. Moitie*, 452 U.S. 394, 398, 101 S.Ct. 2424, 2428, 69 L.Ed.2d 103 (1981).

> Simply put, the doctrine of *res judicata* provides that when a final judgment has been entered on the merits of a case, [i]t is a finality as to the claim or demand in controversy, concluding parties and those in privity with them, not only as to every matter which was offered and received to sustain or defeat the claim or demand, but as

> to any other admissible matter which might have been offered for that purpose.

SEC v. First Jersey Sec., Inc., 101 F.3d 1450, 1463 (2d Cir.1996) (quoting *Nevada v. United States*, 463 U.S. 110, 129-30, 103 S.Ct. 2906, 2918, 77 L.Ed2d 509 (1983)). *Res judicata* therefore bars the subsequent litigation of any claims arising from the transaction or series of transactions which was the subject of the prior suit. *See Interoceanica Corp. v. Sound Pilots, Inc.*, 107 F.3d 86, 90 (2d Cir. 1997) (citing *Restatement (Second) of Judgments* § 24(b)(1982)); *Restatement (Second) of Judgments* § 24 cmt. a ("Claim, in the context of res judicata, has never been broader than the transaction to which it related.").

[5] The burden is on the party seeking to invoke *res judicata* to prove that the doctrine bars the second action. *See Thomas v. New York City*, 814 F.Supp. 1139, 1148 (E.D.N.Y. 1993). Without a demonstration that the conduct complained of in the French action occurred prior to the initiation of the United States action, *res judicata* is simply inapplicable. As we have noted previously:

> With respect to the determination of whether a second suit is barred by res judicata, the fact that both suits involved essentially the same course of wrongful conduct is not decisive; nor is it dispositive that the two proceedings involved the same parties, similar or overlapping facts, and similar legal issues. A first judgment will generally have preclusive effect only where the transaction or connected series of transactions at issue in both suits is the same, that is where the same evidence is needed to support both claims, and where the facts essential to the second were present in the first.

Interoceanica Corp., 107 F.3d at 91 (quoting *SEC v. First Jersey Sec*, 101 F.3d 1450, 1463-64 (2d Cir.1996)).

In this case, Altai has failed to meet its burden of showing that the conduct which forms the basis of the French action—the unauthorized importation into France of Computer Associates's copyrighted work, and the subsequent

distribution of the work in that country—occurred prior to August 1988 when the action was filed in New York. Altai simply asserts that the actions giving rise to the French action "took place prior to February 15, 1990, the date [the French action] was filed" and that they "took place well before [Computer Associates's] United States claims went to trial on March 28, 1990." Appellant's Opening Brief at 23, 34. Absent evidence that the French action is based on conduct by Altai and by FASTER that occurred prior to August 1988, *res judicata* will not bar Computer Associates from pursuing its claims in France.

Altai argues that *res judicata* bars the French action nonetheless, because Computer Associates could have amended its complaint in the United States action to assert its French copyright claims of which it became aware prior to the beginning of trial in the United States. We disagree.

[6-8] For the purposes of *res judicata*, "[t]he scope of litigation is framed by the complaint at the time it is filed." *Los Angeles Branch NAACP v. Los Angeles Unified Sch. Dist.*, 750 F.2d 731, 739 (9th Cir.1984) (filing of supplemental complaint based on defendant's wrongful conduct occurring after filing of original complaint is not mandatory). The *res judicata* doctrine does not apply to new rights acquired during the action which might have been, but which were not, litigated. *See First Jersey Sec.*, 101 F.3d at 1464; *Los Angeles Branch ;NAACP*, 750 F.2d at 739. Although a plaintiff may seek leave to file a supplemental pleading to assert a new claim based on actionable conduct which the defendant engaged in after a lawsuit is commenced, *see* Fed. R. Civ. P. 15(c), he is not required to do so, *see First Jersey Sec.*, 101 F.3d at 1464; *see also Manning*, *953* F2d at 1360 *(res judicata* does not make filing of supplemental pleadings mandatory); *Prime Management Co., Inc v. Steinegger*, 904 F.2d 811, 816 (2d Cir.1990); *Los Angeles Branch NAACP*, 750 F.2d at 739. Altai was under no obligation to amend its complaint in the United States action, and *res judicata* does not bar litigation of claims

arising from transactions which occurred after the United States action was brought.

[9, 10] Even if we were to assume that the French suit arose from transactions identical to those in the United States suit, there is a second reason why Altai may not invoke *res judicata* to bar the French action: the New York federal district court in the United States action could not have exercised personal jurisdiction over FASTER, a principal party to the French suit. *Res judicata* will not apply where " 'the initial forum did not have the power to award the full measure of relief sought in the later litigation.' " *Burgos v. Hopkins*, 14 F.3d 787, 790 (2d Cir.1994) (quoting *Davidson v. Capuano*, 792 F.2d 275, 278 (2d Cir.1986)). Even where a second action arises from some of the same factual circumstances that gave rise to a prior action, *res judicata* is inapplicable if formal jurisdictional or statutory barriers precluded the plaintiff from asserting its claims in the first action. *See id.* (" 'When such formal barriers in fact existed and were operative against a plaintiff in the first action, it is unfair to preclude him from a second action in which he can present those phases of the claim which he was disabled from presenting in the first.' ") (quoting *Restatement (Second) of Judgments* § 26(1)(c) cmt. c (1982)). Such a "formal barrier," the absence of personal jurisdiction over FASTER, precludes application of *res judicata* here.

[11] "It has long been the rule that the standard to be applied in determining whether a federal district court has jurisdiction over the person in diversity cases is the law of the state where the court sits." *Canterbury Belts Ltd. v. Lane Walker Rudkin, Ltd.*, 869 F.2d 34, 40 (2d Cir.1989). The exercise of jurisdiction is proper if the defendant has sufficient contacts to satisfy both the state long arm statute and the Due Process Clause of the Fourteenth Amendment. *See Chaiken v. VV Publ'g Corp.*, No. 95-9301, 119 F.3d 1018, 1025-26 (2d Cir.1997).

[12] Altai has failed to show that the New York federal court adjudicating Computer Associates's United States copyright claims would have had jurisdiction over FASTER

under New York's long arm statute, N.Y. C.P.L.R. § 302(a). That statute limits the jurisdiction of New York courts over non-domiciliaries to those that "transact[ ] any business" within New York, or "regularly do[ ] or solicit[ ] business, or engage[ ] in any other persistent course of conduct, or derive[ ] substantial revenue in the state." *Id.* There is no evidence in the record that FASTER either transacts business within New York or derives substantial revenue from the state.

Even if personal jurisdiction were allowed by New York's long arm statute, the Due Process Clause limits the exercise of personal jurisdiction to persons having certain "minimum contacts" with the forum state. *Burger King Corp. v. Rudzewicz*, 471 U.S. 462, 474, 105 S.Ct. 2174, 2183, 85 L.Ed.2d 528 (1985); *International Shoe Co. v. Washington*, 326 U.S. 310, 316, 66 S.Ct. 154, 158, 90 L.Ed. 95 (1945). A court may exercise personal jurisdiction only over a defendant whose " 'conduct and connection with the forum State are such that he should reasonably anticipate being haled into court there.' " *Burger King Corp.*, 471 U.S. at 474, 105 S.Ct. at 2183 (quoting *World-Wide Volkswagen Corp. v. Woodson*, 444 U.S. 286, 297, 100 SCt. 559. 567, 62 L.Ed.2d 490 (1980)). Essential to the exercise of personal jurisdiction in each case is " 'some act by which the defendant purposely avails itself of the privilege of conducting activities within the forum State, thus invoking the benefits and protections of its laws.' " *Burger King Corp.*, 471 U.S. at 475, 105 S.Ct. at 2184 (quoting *Hanson v. Denckla*, 357 U.S. 235, 253, 78 S.Ct. 1228, 1239-40, 2 L.Ed.2d 1283 (1958)). In this case, Altai has failed to show that FASTER, a French company that distributed software in France, had any contacts with New York, much less "minimum" ones, sufficient to justify the exercise of personal jurisdiction.

On appeal, Altai claims that the essential minimum contacts with the Eastern District of New York exist by virtue of FASTER's 1988 distribution agreement with Altai wherein FASTER agreed to arbitration in Texas. Appellant's Opening Brief at 31-32 n. 20. From the record, we have no indication

that this argument was raised in the district court; for that reason, we normally would disregard it on appeal. *See Vintero Corp. v. Corporacion Venezolana de Fomento*, 675 F.2d 513, 515 (2d Cir.1982); *Schwimmer v. Sony Corp.*, 637 F.2d 41, 49 (2d Cir.1980). In any event, whether or not this agreement standing alone would provide the necessary minimum contacts with Texas, it is immaterial to the question of whether personal jurisdiction would be proper in New York.

In conclusion, there are two reasons why *res judicata* does not prevent Computer Associates from maintaining its action based on French copyright claims in France: (i) the infringing conduct which formed the basis of the French action occurred after the filing of the United States action; and (ii) the New York federal district court lacked personal jurisdiction over FASTER. We therefore affirm the district court.

B. Collateral Estoppel

[13] Altai argues, in the alternative, that Computer Associates is collaterally estopped from claiming that OSCAR 3.5 infringes its French copyright. We disagree.

> **[14]** The doctrine of collateral estoppel bars a party from relitigating in a second proceeding an issue of fact or law that was litigated and actually decided in a prior proceeding, if that party had a full and fair opportunity to litigate the issue in the prior proceeding and the decision of the issue was necessary to support a valid and final judgment on the merits.

Metromedia Co. v. Fugazy, 983 F2d 350, 365 (2d Cir.1992). For collateral estoppel to apply, the issues in each action must be identical, and issues are not identical when the legal standards governing their resolution are significantly different. *See id; see also* 18 Charles A. Wright, et al., 18 *Federal Practice & Procedure* § 4417, at 165 (2d ed.1981).

On appeal, Altai asserts that the French standard for copyrightability of computer programs is not "significantly different" from the standard applied in the United States because, as under United States copyright law, French law protects expression and not ideas. Appellant's Opening Brief at 38. Such a superficial comparison begs key questions: What constitutes expression or ideas in the context of computer software, to what extent may expression be copied with impunity when it is necessary to the communication of the idea, how much expression is not original with the plaintiff or is in the public domain? Altai's argument is far from sufficient to show that the two copyright standards in France and the United States are "identical" as required for application of collateral estoppel. The Commercial Court arrived at a similar conclusion, refusing Altai's request to give the decision in the United States action dispositive effect. We, therefore, affirm the district court's decision that collateral estoppel does not bar litigation of the French action.

C. Foreign Antisuit Injunction

[15, 16] It is well established that a federal court has the power to enjoin a foreign suit by persons subject to its jurisdiction; however, due regard for principles of international comity require that this power should be "used sparingly." *China Trade & Dev. Corp. v. M.E Choong Yong*, 837 F.2d 33, 36 (2d Cir.1987); *United States v. Davis*, 767 F.2d 1025, 1038 (2d Cir.1985). Antisuit injunctions should be "granted only with care and great restraint." *China Trade* 837 F.2d at 36 (internal quotation marks omitted). Ordinarily when the courts of two sovereigns have *in personam* jurisdiction, one court will not try to restrain proceedings before the other.

[17] In determining whether to enjoin foreign litigation, a court must consider, as a threshold matter, whether (i) the parties to both suits are the same and (ii) resolution of the case before the enjoining court would be dispositive of the action to be enjoined. *Id.*

[18] Altai argues that the *China Trade* factors are inapplicable where a final judgment has been reached in the United States forum. We need not decide whether the *China Trade* factors are inapplicable when a final judgment issues in a United States action because we hold that, in this case, the injunction is not necessary to protect our jurisdiction or the integrity of our judgment. While Altai may experience as vexatious Computer Associate's decision to pursue its rights in France, the French action would in no way affect the decision rendered by a court of the United States. In short, the action in this country involved violations of Computer Associates's United States copyright, and the French action involves violations of Computer Associates's French copyright. We can discern no basis for enjoining Computer Associates from pursuing its French action; moreover, the interests of comity caution against such an injunction.

III. CONCLUSION

Based on the foregoing, we affirm the decision of the district court denying Altai's motion to enjoin Computer Associates from continuing to litigate its French copyright infringement action against Altai and FASTER in France, based on actions that occurred in France.

COMPUTER ASSOCIATES INTERNATIONAL, INC.,
Plaintiff,

v.

ALTAI, INC., Defendant.

No. 89-CV-0811 (DRH).

United States District Court,
E.D. New York.

June 17, 1996.

Owner of copyrighted computer program brought action alleging copyright infringement and trade secret misappropriation against competitor. The District Court, 775 F.Supp. 544, held that one of competitor's computer programs was infringing, that second program was not infringing, and that Copyright Act preempted state law trade secret claim. The Court of Appeals affirmed copyright infringement ruling but vacated preemption ruling and remanded, 982 F.2d 693. On remand, the District Court held that trade secret claim was time-barred because discovery rule did not apply to toll limitations period for that claim, 832 F.Supp. 50. On appeal, the Court of Appeals certified question regarding applicability of discovery rule, 22 F.3d 32. The Supreme Court of Texas, 918 S.W.2d 453, answered question, finding that discovery rule did not apply to trade secret claim. The Court of Appeals then issued mandate and affirmed District Court decision that dismissed that claim, 61 F.3d 6. Competitor then sought to enjoin owner from pursuing copyright infringement action instituted against competitor in France. The District Court, Hurley, J., held that: (1) French action was not barred by res judicata; (2) French action was not barred by collateral estoppel; and (3) competitor did not satisfy threshold requirements for foreign antisuit injunction.

Denied.

1. Judgment

Copyright owner's infringement action in France against competitor was not precluded by res judicata, notwithstanding prior United States action against competitor, as United States court did not likely have either subject matter jurisdiction over claim that owner's rights were infringed under French copyright law due to actions which took place in France or personal jurisdiction over French distributor who was defendant in French action, French distributor was not in privity with party in United States action, acts subject to suit in France occurred after commencement of United States action, and actions had significant differences.

2. Judgment

Copyright owner's action in France against competitor, alleging copyright infringement of computer program under French law, was not barred by collateral estoppel, notwithstanding prior United States action against competitor in which no infringement was found, as legal standards of United States and France were not the same.

3. Injunction

Competitor failed to satisfy threshold requirements for foreign antisuit injunction to preclude copyright owner from maintaining infringement suit against competitor in France which alleged violation of owner's rights under French law, notwithstanding owner's prior United States action against competitor, as French action involved two parties that were not present in United States action and were not in privity with parties to United States action, and United States action was not dispositive of French action.

Weil, Gotshal & Manges, by Stephen D. Kahn, New York City, for Plaintiff.

Ingersoll & Bloch, Chartered, The Sherman House, by Susan G. Braden, Washington, D.C., for Defendant.

MEMORANDUM AND ORDER

HURLEY, District Judge.

Currently pending before the Court in the above-captioned case is a motion by Defendant Altai, Inc. ("Defendant") to enjoin Plaintiff Computer Associates, Inc. ("Plaintiff") from continuing to maintain an action filed by Plaintiff in France (the "French action"). For the reasons set forth below, Defendant's motion is denied.

PROCEDURAL BACKGROUND

I. *Plaintiff's United States Action*

Plaintiff, a Delaware corporation with its principal place of business in New York, brought this copyright infringement and trade secret misappropriation action against Defendant, a Texas corporation with its principal place of business in Texas, in August 1988. Plaintiff alleged, *inter alia*, that Defendant had copied substantial portions of Plaintiff's SCHEDULER computer program into Defendant's own OSCAR 3.4 software program. *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 775 F.Supp. 544, 549, 552-53 (E.D.N.Y.1991), *aff'd in part and vacated in part*, 982 F.2d 693 (2d Cir.1992). Once suit was brought, Defendant rewrote parts of OSCAR 3.4 and replaced it with OSCAR 3.5. (Pl.'s Mem. at 4; Def.'s Reply Mem. at 8.) Thereafter, Plaintiff amended its complaint to assert claims of copyright infringement with regard to OSCAR 3.5. (Def's Reply Mem. at 8.)

By Memorandum and Order entered August 12, 1991, the Honorable George C. Pratt found that Defendant's OSCAR 3.4 computer program had infringed Plaintiff's copyrighted SCHEDULER program and awarded $364,444 in actual damages plus pre-judgment interest.[1] *Computer Assocs.*, 775 F.Supp. at 560-61, 571-73. With respect to Plaintiff's second claim, Judge Pratt found that Defendant's

---

[1] The case at bar was reassigned to the undersigned on December 8, 1994.

OSCAR 3.5 program was not substantially similar to a portion of SCHEDULER called ADAPTER and, therefore, did not infringe Plaintiff's copyrights. *Id.* at 561-62, 573. Finally, Judge Pratt concluded that Plaintiff's state law trade secret misappropriation claim had been preempted by the federal Copyright Act. *Id.* at 563-64.

On December 17, 1992, the Second Circuit affirmed the district court's findings and judgment as to Plaintiff's copyright claims but vacated its holding that Plaintiff's state law trade secret claim was preempted by federal copyright law. Therefore, the circuit court remanded the case to the district court for consideration of the trade secret claim. *Computer Assocs.*, 982 F.2d 693, 712-15, 719-21. On August 20, 1993, Judge Pratt ruled that under Texas law, Plaintiff's trade secret claim was barred by the two year statute of limitations. *Computer Assocs. Int'l Inc. v. Aitai, Inc.*, 832 F.Supp. 50, 54 (E.D.N.Y. 1993), *aff'd*, 61 F.3d 6 (1995). Plaintiff appealed that ruling and the Second Circuit certified the question of Texas law to the Supreme Court of that state. *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 22 F.3d 32, 37 (2d Cir.1994). On April 3, 1996, following the decision of the Supreme Court of Texas on March 14, 1996, the Second Circuit issued a mandate affirming the decision of Judge Pratt that dismissed Plaintiff's remaining trade secret claim.[2] *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, No. 93-7957, 1996 WL 154622, at *1 (2d Cir. Apr. 3, 1996).

---

[2] The Court notes that the August 20, 1993 Order by Judge Pratt dismissed Plaintiff's remaining claims. As discussed above, this Order was affirmed by the Second Circuit on April 3, 1996. The parties post-affirmance submissions, however, do not suggest that the Court is divested of jurisdiction. Accordingly, the Court assumes, for purposes of this Order only, that it has the authority to entertain this Motion, notwithstanding the Court's reservation over its present jurisdiction.

II. *Plaintiff's French Action*

In 1990, Plaintiff and L'Agence Pour La Protection Des Programmes ("L'Agence")[3] filed an action in the Tribunal de Commerce in Bobigny, France (the "Commercial Court")[4] against Defendant and la Societe FASTER, S.A.R.L. ("FASTER"), a French company owned by a Dutch concern, which was distributing computer software containing OSCAR 3.5. (Pl.'s Mem. at 7; Def.'s Mem. at 5.) The gravamen of the French action is that the defendants violated Plaintiff's rights under French copyright law[5] by virtue of Defendant's unauthorized importation, and FASTER's unauthorized distribution, of OSCAR 3.5 in France. (Pl.'s Feb. 15, 1990 Commercial Ct. Compl. at 4-5; Pl.'s Mem at 14.)

By Ruling entered January 20, 1995, the Commercial Court found that Defendant's OSCAR 3.5 program does not infringe upon Plaintiff's ADAPTER program under French copyright law. (Jan. 20, 1995 Ruling of the Commercial Ct. at 17-22.) On August 25, 1995, Plaintiff appealed the decision of the Commercial Court to the Paris Court of Appeals. (Def.'s Second Supplemental Mem. at 2.) On April 11, 1995, Defendant amended its motion to enjoin Plaintiff from continuing to maintain its appeal of the Commercial Court's decision. (Def.'s Apr. 10, 1995 Mem. at 1-5.) According to the present record, the Paris Court of Appeals

---

[3] L'Agence is a "private professional society representing the interests of authors and copyright owners of computer programs." (Def.'s Mem. at 9.)

[4] The Commercial Court is a court of limited jurisdiction over civil disputes between parties with commercial status or for acts that are commercial in nature. (Def's Mem. at 8.)

[5] Plaintiff's computer programs are accorded protection under French copyright law pursuant to the Universal Copyright Convention of Geneva and the Berne Convention for the Protection of Literary and Artistic Works, ratified by the United States in 1955 and 1989 respectively, which, read conjunctively, provide that "a foreign work is entitled to 'national treatment' in all signatory countries, if it originates from a member country where copyright protection is otherwise available." (Def's Mem. at 6-7; Pl.'s Feb. 15, 1990 Commercial Ct. Compl. at 3.)

has not yet taken any action with respect to that appeal. (Def.'s Second Supplemental Mem. at 2.)

III. *Instant Motion*

By the instant motion, Defendant seeks to enjoin Plaintiff from continuing to proceed with its French action. First, Defendant maintains that Plaintiff's French action is barred under the doctrine of res judicata. (Def.'s Mem. at 12-17, 21.) Alternatively, Defendant contends that Plaintiff is collaterally estopped from pursuing its French claims. In response, Plaintiff argues that, as an initial matter, Defendant has failed to satisfy certain threshold requirements for a foreign antisuit injunction. (Pl.'s Mem. at 11.) In addition, Plaintiff asserts that neither res judicata nor collateral estoppel precludes Plaintiff's French action. (*See id.* at 17-25.) For the reasons set forth below, the Court finds that Plaintiff's French action is not barred by the doctrine of res judicata. Moreover, the Court finds that collateral estoppel does not bar Plaintiff's French claims. Finally, the Court finds that Defendant has failed to meet the threshold requirements for a foreign antisuit injunction.

Against that backdrop, the Court will address each of Defendant's arguments in the order presented.

DISCUSSION

I. *Res Judicata*

[1] The doctrine of res judicata provides that "a final judgment on the merits of an action precludes the parties or their privies from relitigating issues that were or could have been raised in that action." *Burgos v. Hopkins*, 14 F.3d 787, 789 (2d Cir.1994) (quoting *Allen v. McCurry*, 449 U.S. 90, 94, 101 S.Ct. 411, 414, 66 L.Ed.2d 308 (1980)). Res judicata, however, will not apply where "the initial forum did not have the power to award the full measure of relief sought in the later litigation." *Id.* at 790 (quoting *Davidson v. Capuano*, 792 F.2d 275, 278 (2d Cir.1986)) (further citation omitted).

> The general rule [against relitigation of a claim] is largely predicated on the assumption that the jurisdiction in which the first judgment was rendered was one which put no formal barriers in the way of a litigant's presenting to a court in one action the entire claim including any theories of recovery or demands for relief that might have been available to him under applicable law. When such formal barriers in fact existed and were operative against a plaintiff in the first action, it is unfair to preclude him from a second action in which he can present those phases of the claim which he was disabled from presenting in the first.

Id. (quoting Restatement (Second) of Judgments § 26(1)(c) cmt. c (1982)). Furthermore, "[w]hile a previous judgment may preclude litigation of claims that arose 'prior to its entry, it cannot be given the effect of extinguishing claims which did not even then exist and which could not possibly have been sued upon in the previous case.' " *Prime Management Co. v. Steinegger*, 904 F.2d 811, 816 (2d Cir.1990) (quoting *Lawlor v. National Screen Serv. Corp.*, 349 U.S. 322, 328, 75 S.Ct. 865, 868, 99 L.Ed. 1122 (1955)).

Here, Plaintiff asserts that there existed several formal barriers which precluded it from presenting its entire claim in the United States (the "U.S.") action. The Court agrees.

First, the Court notes that Defendant has failed to establish that a U.S. court could have exercised subject matter jurisdiction over Plaintiff's claims that are the subject of the French suit. The action before the Commercial Court is based upon alleged infringement of Plaintiff's rights under French copyright law arising out of the unauthorized distribution of OSCAR 3.5 in France by FASTER, a French entity, as well as the unauthorized importation into France of OSCAR 3.5 by Defendant. (Pl.'s Mem. at 14.) It is well settled that "copyright laws generally do not have extraterritorial application." *Update Art, Inc. v. Modiin Publishing, Ltd.*, 843 F.2d 67, 73 (2d Cir.1988). Accordingly, "[w]here copyright infringement occurs both inside and outside the United States,

the district court has jurisdiction, but only over the U.S. infringement." *GB Mktg. USA Inc. v. Gerolsteiner Brunnen*, 782 F.Supp. 763, 772 (W.D.N.Y.1991).

In the instant case, however, Defendant attempts to rely upon an exception to the general rule, which authorizes a U S. court to exercise jurisdiction over copyright infringement occurring outside of the U.S. "when the type of infringement permits further reproduction abroad—such as the unauthorized manufacture of copyrighted material in the United States." *Update Art*, 843 F.2d at 73. In other words, for the exception to apply, Defendant must identify an infringing act by Defendant that occurred in the United States which led to further infringement abroad. *See id.*; *De Bardossy v. Puski* 763 F.Supp. 1239, 1243 (S.D.N.Y.1991). The present record does not reveal the existence of any infringing act committed by Defendant in the U.S. with respect to OSCAR 3.5, the subject of Plaintiff's French action. To that end, Defendant suggests that if OSCAR 3.5 had been found to infringe upon Plaintiff's copyright, Plaintiff could have recovered damages from Defendant in the U.S. action with respect to the foreign sales of OSCAR 3.5. (Def.'s Reply Mem. at 9-10.) Defendant supports this proposition by reference to Plaintiff's Second Amended Complaint, wherein Plaintiff "sought an accounting 'for any and *all* profits derived by Altai for the distribution of its . . . programs . . .,' as well as 'actual damages' in an amount to be determined at trial." (*Id.* at 10 (quoting with emphasis Pl.'s Second Am. Compl. at 23.)) Such an allegation, however, is clearly insufficient to make the requisite showing.

Moreover, the Court agrees with Plaintiff that the case law supports the view that a U.S. court may very well have declined to exercise jurisdiction over the issue of Plaintiff's French copyright. Accordingly, the Court cannot conclude that should Plaintiff have chosen to assert issues of French copyright law in the U.S. action, it would have been permitted to do so.

Second, the Court is not convinced that a U.S. court could have exercised personal jurisdiction over FASTER, a French company that distributed Defendant's software in France and which was a defendant in the French action. Defendant's contention that "there is no reason to assume" that FASTER would not have submitted to the jurisdiction of the U.S. courts because it had done so in the past is not persuasive. (Def.'s Reply Mem. at 5.)

Moreover, although Defendant is correct in stating that FASTER need not have been a party in the U.S. action for res judicata to apply, rather only that Faster be in privity with a party in the U.S. action, namely Defendant, the Court is not persuaded that this is in fact the case. (*Id.* at 3); *see also* (*Greenberg v. Board of Governors of Fed. Reserve Sys.*, 968 F.2d 164, 168 (2d Cir.1992). For two parties to be in privity, the interests involved in the prior litigation must have been virtually identical to those in the later litigation such that the precluded party's interests have been represented in the first action. *Chase Manhattan Bank, N.A. v. Celotex Corp.*, 56 F.3d 343, 345 (2d Cir.1995). "[T]he key seems to be that [the] interests [of the non-party] have been adequately represented by others who have litigated matter and lost. . . ." *Id.* (quoting Allan D. Vestal, *Res Judicata/Preclusion* V-125-26 (1969)). Here, this is not the case as the second suit, the French action, is based on different acts of infringement, namely, the alleged infringement of Plaintiff's rights under French copyright law arising out of the unauthorized distribution of OSCAR 3.5 in France by FASTER, as well as the unauthorized importation into France of OSCAR 3.5 by Defendant. Thus, FASTER's interests could not have been adequately represented in the U.S. action as these issues were not raised therein.[6] Moreover, Plaintiff should not be

---

[6] Defendant additionally asserts that it is in privity with FASTER because if Defendant has no liability for copyright infringement as to OSCAR 3.5, then FASTER has no liability. (Def.'s Reply Mem. at 3-5.) This assertion, however, assumes that FASTER's liability arises solely from Defendant's. While it may be true that Defendant has a contractual

penalized for failing to assert these claims in the U.S. action as the acts of infringement that form the basis of Plaintiff's French action occurred *after* the commencement of Plaintiff's U.S. action. (Pl.'s Mem. at 20); *see also Prime Management Co. v. Steinegger*, 904 F.2 811, 816 (2d Cir.1990) (finding res judicata cannot bar second suit based on conduct that "had not occurred when the first suit was brought").

Even assuming *arguendo* the absence of any jurisdictional barriers over Plaintiff's claims, the Court still finds that res judicata would not bar Plaintiff's French suit. Under res judicata, "preclusion is limited to the transaction at issue, in the first action. Litigation over other transactions, though involving the same parties and similar facts and legal issues, is not precluded." *Greenberg*, 968 F.2d at 168. In that vein, the fact that both copyright infringement claims at issue may have "involved essentially the same course of wrongful conduct," *i.e.*, unauthorized copying of Plaintiff's computer program, "is not decisive." *Lawlor*, 349 U.S. at 327, 75 S.Ct. at 868.

Moreover, Plaintiff notes a number of differences in the two actions. (Pl.'s Mem. at 21.) First, the acts giving rise to each action are different, as the infringement in Plaintiff's French action arose out of separate acts committed in France. (*Id.*) Next, FASTER, a major party in the French action, was not involved in the U.S. action and, accordingly, Defendant's relationship with FASTER was never explored therein. (*See id.*) Finally, the U.S. action did not concern itself with French copyright law, the essence of the French suit. (*See id.*)

---

obligation to indemnify FASTER for any damages resulting from any copyright infringement of Defendant's products, (Def.'s Reply Mem. at 4), only suit against FASTER can prevent FASTER from distributing the infringing product or "effect remedies regarding infringing goods that have already entered the stream of commerce." *See Black & Decker Corp. v. Sanyei Am. Corp.*, 650 F.Supp. 406, 409 (N.D.Ill.1986). Furthermore, the Court notes that Defendant has not established that U.S. copyright law is the same as French copyright law and, accordingly FASTER's interests under French law could have been adequately represented by Defendant in the U.S. action.

Finding that Plaintiff's claims in the Commercial Court are not barred under the doctrine of res judicata, the Court now turns its attention to the standards for collateral estoppel.

II. *Collateral Estoppel*

> [2] The doctrine of collateral estoppel bars a party from relitigating in a second proceeding an issue of fact or law that was litigated and actually decided in a prior proceeding, if that party had a full and fair opportunity to litigate the issue in the prior proceeding and the decision of the issue was necessary to support a valid and final judgment on the merits.

Metromedia Co. v. Fugazy, 983 F.2d 350, 365 (2d Cir.1992), *cert. denied*, 508 U.S. 952, 113 S.Ct. 2445, 124 L.Ed.2d 662 (1993). For collateral estoppel to apply, however, the issues must be identical, and this is not the case when the "legal standards governing their resolution are significantly different." *Id.; see also* 18 Charles A. Wright *et al.*, Federal Practice and Procedure § 4417, at 165 (1981).

In the instant case, Defendant asserts that the legal standards for determining issues of copyright infringement are identical in the United States and France and, thus, collateral estoppel should bar Plaintiff's French claims. (Def.'s Mem. at 18; Def.'s Reply Mem. at 13-17; Def.'s Supplemental Mem. at 1-2; Def's Reply to Pl.'s Supplemental Mem. at 3-4.) Plaintiff, however, contends that the two standards are different. (Pl.'s Mem. at 23-25; Pl.'s Supplemental Mem. at 2.) After a review of the current record, the Court is unable to conclude that the two standards are the same. Accordingly, the Court holds that Plaintiff's French action is not barred under the doctrine of collateral estoppel.

III. *Foreign Antisuit Injunction*

[3] It is well settled that a federal court has the power to enjoin foreign suits by persons subject to its jurisdiction. *China Trade and Dev. Corp. v. M.V. Choong Yong*, 837 F.2d 33, 35 (2d Cir.1987); *United States v. Davis*, 767 F.2d 1025,

1038 (2d Cir.1985). International comity, however, "demands that this extraordinary remedy be used only after other means of redressing the injury sought to be avoided have been explored." *Davis*, 767 F.2d at 1038. In addition, because such an order effectively limits the jurisdiction of the foreign tribunal, it should be "used sparingly" and granted "only with care and great restraint." *China Trade*, 837 F.2d at 35-36 (citations omitted).

Concurrent jurisdiction in two courts does not necessarily result in a jurisdictional conflict. *Id.* at 36. "[P]arallel proceedings on the same in personam claim should ordinarily be allowed to proceed simultaneously, at least until a judgment is reached in one which can be pled as res judicata in the other[.]"[7] *Id.* (quoting *Laker Airways, Ltd. v. Sabena, Belgian World Airlines*, 731 F.2d 909, 926-27 (D.C.Cir.1984)) (further citation omitted). "Since parallel proceedings are ordinarily tolerable, the initiation before a foreign court of a suit concerning the same parties and issues as a suit already pending in a United States court does not, without more, justify enjoining a party from proceeding in the foreign forum." *Id.*

In *China Trade*, the Second Circuit adopted the approach taken by the District Court and found that in determining whether to enjoin foreign litigation, a court will first examine two threshold requirements: (1) whether the parties to both suits are the same; and (2) whether resolution of the case before the enjoining court would be dispositive of the action to be enjoined.[8] *Id.* When these threshold requirements are met, a court should then examine the following five factors:

---

[7] Because the Court has already determined that res judicata does not apply to the instant facts, the Court will proceed in examining whether Defendant has met the standards for a foreign antisuit injunction.

[8] The Court has considered and rejected Defendant's arguments that these threshold standards do not apply to the case at bar. *See China Trade*, 837 F.2d at 36 ("In general we agree with the approach taken by Judge Motley. . . ."). *See also American Home Assurance Co. v. Insurance Corp. of Ireland, Ltd.*, 603 F.Supp. 636, 643 (S.D.N.Y. 1984).

> (1) frustration of a policy in the enjoining forum; (2) the foreign action would be vexatious; (3) a threat to the issuing court's in rem or quasi in rem jurisdiction;[9] (4) the proceedings in the other forum prejudice other equitable considerations; or (5) adjudication of the same issues in separate actions would result in delay, inconvenience, expense, inconsistency, or a race to judgment.

Id. at 35, 36.

With respect to the first threshold condition, identity of parties, plaintiff's French action includes two parties not present in Plaintiff's U.S. action, FASTER and *L'Agence*. *Cf. American Home Assurance Co. v. Insurance Corp. of Ireland, Ltd.*, 603 F.Supp. 636, 643 (S.D.N.Y.1984) (finding parties same in both actions when all parties to foreign action present in U.S. action). In that vein, the Court has already determined that Defendant and FASTER are not in privity for the purposes of the two proceedings issue.

As to the second threshold requirement, the Court finds that the U.S. action cannot be deemed dispositive of plaintiff's French action as the latter action involves issues that were neither raised, nor could have been raised, in the U.S. action.

Based on the foregoing, the Court finds that Defendant has failed to satisfy the threshold requirements for a foreign antisuit injunction. Accordingly, the remaining five factors need not be, and are not, addressed by the Court.

---

[9] To the extent Defendant contends that the Court should examine whether the jurisdiction the U.S. court is threatened by the continuation of the French action, *see* Def's Reply Mem. at 18, the Court notes that Defendant has failed to make such a showing. *See China Trade*, 837 F.2d at 36, 37 ("[I]f a foreign court is not merely proceeding in parallel but is attempting to carve out exclusive jurisdiction over the action, an injunction may also be necessary to protect the enjoining court's jurisdiction.").

CONCLUSION

For the reasons indicated above, Defendant's motion to enjoin Plaintiff from continuing to maintain its French copyright action is denied.

SO ORDERED.

COMPUTER ASSOCIATES INTERNATIONAL, INC.,
Plaintiff-Appellant-Cross-Appellee,

v.

ALTAI, INC., Defendant- Appellee-Cross-Appellant.

No. 762, Dockets 91-7893, 91-7935.

United States Court of Appeals,
Second Circuit.

Argued Jan. 9, 1992.

Decided June 22, 1992.

Amended Opinion Dec. 17, 1992.

Owner of copyrighted computer program brought action for infringement of nonliteral elements of operating system compatibility component of program. The United States District Court for the Eastern District of New York, George C. Pratt, Circuit Judge, sitting by designation, 775 F.Supp. 544, held that written compatibility component was not substantially similar to copyrighted component and that Copyright Act preempted state law claim for misappropriation of trade secrets. Appeal was taken. The Court of Appeals, Walker, Circuit Judge, held that: (1) nonliteral elements of compatibility component of rewritten computer program were not substantially similar to copyrighted work; (2) use of expert evidence in determining substantial similarity between computer programs was not error; and (3) federal copyright preemption did not apply to state law trade secret claims.

Affirmed in part, vacated in part, and remanded.

Altimari, Circuit Judge, concurred in part, dissented in part and filed opinion.

1. Copyrights and Intellectual Property

In any suit for copyright infringement, plaintiff must establish its ownership of valid copyright, and that defendant copied copyrighted work.

2. Copyrights and Intellectual Property

Defendant's copying of copyrighted work may be established for copyright infringement claim either by direct evidence or by showing that defendant had access to copyrighted work and that defendant's word is substantially similar to copyrightable material.

3. Copyrights and Intellectual Property

Copyright protection generally extends beyond literary work's strictly textual form to its nonliteral components.

4. Copyrights and Intellectual Property

Literal elements of computer programs, their source and object codes, are subject of copyright protection.

5. Copyrights and Intellectual Property

If computer audiovisual display is copyrighted separately as an audiovisual work, apart from computer program, the display may be protectable regardless of underlying program's copyright status.

6. Copyrights and Intellectual Property

When determining whether nonliteral elements of computer programs are substantially similar in copyright infringement case, the court must first break down allegedly infringed program into its constituent structural parts and isolate each level of abstraction contained within that structure; sift protectable expression form nonprotectable material; and then compare material structure of allegedly infringing program.

7. Copyrights and Intellectual Property

Evidence of similarly efficient structure of computer programs is not particularly probative in case alleging

copyright infringement based on copying of nonliteral elements of program, and, thus, should be disregarded and determined whether programs are substantially similar.

8. Copyrights and Intellectual Property

Expert testimony may be used in copyright case to assist fact-finder in ascertaining whether defendant has copied any part of plaintiff's work. Fed.Rules Evid.Rule 706, 28 U.S.C.A.

9. Evidence

District court had discretion to decide to what extent, if any, expert opinion regarding highly technical nature of computer programs, including substantial similarity, is warranted in copyright infringement case. Fed.Rules Evid.Rule 706, 28 U.S.C.A.

10. Evidence

Permitting use of expert evidence on substantial similarity between computer programs in infringement case involving nonliteral elements of program was not error where expert testimony shed valuable light on subject matter of litigation and trial judge remained trier of fact. Fed.Rules Evid.Rule 706, 28 U.S.C.A.

11. Copyrights and Intellectual Property

Substantial similarity, in copyright infringement case involving nonliteral elements of computer program, should be determined by filtering out unprotected aspects of allegedly infringed program and comparing end product to structure of suspect program.

12. Copyrights and Intellectual Property

Nonliteral elements of operating system compatibility component of computer programs were not substantially similar, as needed for copyright infringement suit, where virtually no lines of code were identical in disputed programs, few similarities in parameters in the macro did not warrant finding of infringement, list of services were not protectable

by copyright, and similarities of organizational chart were irrelevant because of simple and obvious nature of programs.

13. Copyrights and Intellectual Property

Functional elements of computer program elements taken from public domain do not qualify for copyright protection.

14. Copyrights and Intellectual Property

States

Federal copyright preemption does not apply to state law if an extra element a state law claim changes nature of action so that it is qualitatively different from a copyright infringement claim. 17 U.S.C.A. §§ 301, 301(a,b).

15. Fraud

States

Torts

Federal copyright preemption does not apply to state law claims for unfair competition based on breach of confidential relationship, breach of fiduciary duty, and trade secrets. 17 U.S.C.A. § 301.

16. States

Torts

Defendant's breach of duty is generally "extra element" that precludes federal copyright preemption from applying to state law trade secret claims. 17 U.S.C.A. § 301.

17. Torts

Constructive notice of breach of duty of confidentiality resulting from stealing of secrets is sufficient to third-party acquisition claim under New York trade secrets claim.

18. Torts

Whether computer software company had constructive notice of programmer's breach of confidentiality agreement with competitor, so as to make company liable under Texas

law for trade secret misappropriation was fact question; company' president was generally familiar with competitors programs, and programmer used a stolen program in office adjacent to company's president during period when programmer had frequent contact with president.

19. Torts

Whether computer software company misappropriated competitors trade secrets under Texas law by incorporating them into computer programs was fact question where, after actual knowledge of previous trade secret violations by programmer, company created new program that may have embodied a trade secret that programmer brought to company while rewriting program.

20. Torts

Allegations that computer programmer learned of competitor's trade secrets while employed at competitor, that computer software company misappropriated trade secrets by incorporating competitor's programs into its own product after programmer went to work for new company, and that trade secret misappropriation was carried in willful, wanton, and reckless manner in disregard of competitor's rights stated claim for wrongful acquisition of trade secrets claim under Texas law.

Steven D. Kahn, New York City (Stuart D. Levi, Beth K. Neelman, Carol A. Motyka, Weil, Gotshal & Manges, Michael A. McElroy, Computer Associates Intern., Inc., of counsel), for plaintiff-appellant, cross-appellee.

Susan G. Braden, Washington, DC (Christ M. Kacoyannakis, Anderson Kill Olick & Oshinshy, Washington, DC, Stephen D. Susman, Susman Godfrey, Houston, TX, of counsel), for defendant-appellee, cross-appellant.

Bruce A. Lehman, Swidler & Berlin, Washington, DC, filed a brief amicus curiae, on behalf of The Software Publishers Ass'n.

Peter M.C. Choy, Mountain View, CA, filed a brief amicus curiae, on behalf of the American Committee for Interoperable Systems.

J. David Cabello, Houston, TX, David R. Bradford, Provo, UT, Robert H. Kohn, Scotts Valley, CA, filed a brief amici curiae, on behalf of Compaq Computer Corp., Novell, Inc., and Borland Intern., Inc.

Before ALTIMARI, MAHONEY and WALKER, Circuit Judges.

WALKER, Circuit Judge:

In recent years, the growth of computer science has spawned a number of challenging legal questions, particularly in the field of copyright law. As scientific knowledge advances, courts endeavor to keep pace, and sometimes—as in the area of computer technology—they are required to venture into less than familiar waters. This is not a new development, though. "From its beginning, the law of copyright has developed in response to significant changes in technology." *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 430, 104 S.Ct. 774, 782, 78 L.Ed.2d 574 (1984).

Article I, section 8 of the Constitution authorizes Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." The Supreme Court has stated that "[t]he economic philosophy behind the clause . . . is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare. . . ." *Mazer v. Stein*, 347 U.S. 201, 219, 74 S.Ct. 460, 471, 98 L.Ed. 630 (1954). The author's benefit, however, is clearly a "secondary" consideration. *See United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 158, 68 S.Ct. 915, 929, 92 L.Ed. 1260 (1948). "[T]he ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good." *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156, 95 S.Ct. 2040, 2044, 45 L.Ed.2d 84 (1975).

Thus, the copyright law seeks to establish a delicate equilibrium. On the one hand, it affords protection to authors as an incentive to create, and, on the other, it must appropriately limit the extent of that protection so as to avoid the effects of monopolistic stagnation. In applying the federal act to new types of cases, courts must always keep this symmetry in mind. *Id.*

Among other things, this case deals with the challenging question of whether and to what extent the "non-literal" aspects of a computer program, that is, those aspects that are not reduced to written code, are protected by copyright. While a few other courts have already grappled with this issue, this case is one of first impression in this circuit. As we shall discuss, we find the results reached by other courts to be less than satisfactory. Drawing upon longstanding doctrines of copyright law, we take an approach that we think better addresses the practical difficulties embedded in these types of cases. In so doing, we have kept in mind the necessary balance between creative incentive and industrial competition.

This appeal comes to us from the United States District Court for the Eastern District of New York, the Honorable George C. Pratt, *Circuit Judge*, sitting by designation. By Memorandum and Order entered August 12, 1991, Judge Pratt found that defendant Altai, Inc.'s ("Altai"), OSCAR 3.4 computer program had infringed plaintiff Computer Associates' ("CA"), copyrighted computer program entitled CA-SCHEDULER. Accordingly, the district court awarded CA $364,444 in actual damages and apportioned profits. Altai has abandoned its appeal from this award. With respect to CA's second claim for copyright infringement, Judge Pratt found that Altai's OSCAR 3.5 program was not substantially similar to a portion of CA-SCHEDULER called ADAPTER, and thus denied relief. Finally, the district court concluded that CA's state law trade secret misappropriation claim against Altai had been preempted by the federal Copyright Act. CA appealed from these findings.

Because we are in full agreement with Judge Pratt's decision and in substantial agreement with his careful reasoning regarding CA's copyright infringement claim, we affirm the district court's judgment on that issue. However, we vacate the district court's preemption ruling with respect to CA's trade secret claim, and remand the case to the district court for further proceedings.

BACKGROUND

We assume familiarity with the facts set forth in the district court's comprehensive and scholarly opinion. *See Computer Assocs. Int'l., Inc. v. Altai, Inc.*, 775 F.Supp. 544, 549-55 (E.D.N.Y.1991). Thus, we summarize only those facts necessary to resolve this appeal.

I. COMPUTER PROGRAM DESIGN

Certain elementary facts concerning the nature of computer programs are vital to the following discussion. The Copyright Act defines a computer program as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101. In writing these directions, the programmer works "from the general to the specific." *Whelan Assocs., Inc. v. Jaslow Dental Lab., Inc.*, 797 F.2d 1222, 1229 (3d Cir.1986), *cert. denied*, 479 U.S. 1031, 107 S.Ct. 877, 93 L.Ed.2d 831 (1987). *See generally* Steven R. Englund, Note, *Idea, Process, or Protected Expression?: Determining the Scope of Copyright Protection of the Structure of Computer Programs*, 88 MICH.L.REV. 866, 867-73 (1990) (hereinafter "Englund"); Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 STAN. L.REV. 1045, 1051-57 (1989) (hereinafter "Menell"); Mark T. Kretschmer, Note, *Copyright Protection For Software Architecture: Just Say No!*, 1988 COLUM.BUS.L.REV. 823, 824-27 (1988) (hereinafter "Kretschmer"); Peter G. Spivack, Comment, *Does Form Follow Function? The Idea/Expression Dichotomy In Copyright Protection of Computer Software*, 35 U.C.L.A.L.REV. 723, 729-31 (1988) (hereinafter "Spivack").

The first step in this procedure is to identify a program's ultimate function or purpose. An example of such an ultimate purpose might be the creation and maintenance of a business ledger. Once this goal has been achieved, a programmer breaks down or "decomposes" the program's ultimate function into "simpler constituent problems or 'subtasks,'" Englund, at 870, which are also known as subroutines or modules. *See* Spivack, at 729. In the context of a business ledger program, a module or subroutine might be responsible for the task of updating a list of outstanding accounts receivable. Sometimes, depending upon the complexity of its task, a subroutine may be broken down further into sub-subroutines.

Having sufficiently decomposed the program's ultimate function into its component elements, a programmer will then arrange the subroutines or modules into what are known as organizational or flow charts. Flow charts map the interactions between modules that achieve the program's end goal. *See* Kretschmer, at 826.

In order to accomplish these intra-program interactions, a programmer must carefully design each module's parameter list. A parameter list, according to the expert appointed and fully credited by the district court, Dr. Randall Davis, is "the information sent to and received from a subroutine." *See* Report of Dr. Randall Davis, at 12. The term "parameter list" refers to the form in which information is passed between modules (e.g. for accounts receivable, the designated time frame and particular customer identifying number) and the information's actual content (e.g. 8/91-7/92; customer No. 3) *Id.* With respect to form, interacting modules must share similar parameter lists so that they are capable of exchanging information.

"The functions of the modules in a program together with each module's relationships to other modules constitute the 'structure' of the program." Englund, at 871. Additionally, the term structure may include the category of modules referred to as "macros." A macro is a single instruction that

initiates a sequence of operations or module interactions within the program. Very often the user will accompany a macro with an instruction from the parameter list to refine the instruction (e.g. current total of accounts receivable (macro), but limited to those for 8/91 to 7/92 from customer No. 3 (parameters)).

In fashioning the structure, a programmer will normally attempt to maximize the program's speed, efficiency, as well as simplicity for user operation, while taking into consideration certain externalities such as the memory constraints of the computer upon which the program will be run. *See id.*; Kretschmer, at 826; Menell, at 1052. "This stage of program design often requires the most time and investment." Kretschmer, at 826.

Once each necessary module has been identified, designed, and its relationship to the other modules has been laid out conceptually, the resulting program structure must be embodied in a written language that the computer can read. This process is called "coding," and requires two steps. *Whelan*, 797 F.2d at 1230. First, the programmer must transpose the program's structural blue-print into a source code. This step has been described as "comparable to the novelist fleshing out the broad outline of his plot by crafting from words and sentences the paragraphs that convey the ideas." Kretschmer, at 826. The source code may be written in any one of several computer languages, such as COBAL, FORTRAN, BASIC, EDL, etc., depending upon the type of computer for which the program is intended. *Whelan*, 797 F.2d at 1230. Once the source code has been completed, the second step is to translate or "compile" it into object code. Object code is the binary language comprised of zeros and ones through which the computer directly receives its instructions. *Id.* at 1230-31; Englund, at 868 & n. 13.

After the coding is finished, the programmer will run the program on the computer in order to find and correct any logical and syntactical errors. This is known as "debugging" and,

once done, the program is complete. *See* Kretschmer, at 826-27.

II. FACTS

CA is a Delaware corporation, with its principal place of business in Garden City, New York. Altai is a Texas corporation, doing business primarily in Arlington, Texas. Both companies are in the computer software industry—designing, developing and marketing various types of computer programs.

The subject of this litigation originates with one of CA's marketed programs entitled CA-SCHEDULER. CA-SCHEDULER is a job scheduling program designed for IBM mainframe computers. Its primary functions are straightforward: to create a schedule specifying when the computer should run various tasks, and then to control the computer as it executes the schedule. CA-SCHEDULER contains a sub-program entitled ADAPTER, also developed by CA. ADAPTER is not an independently marketed product of CA; it is a wholly integrated component of CA-SCHEDULER and has no capacity for independent use.

Nevertheless, ADAPTER plays an extremely important role. It is an "operating system compatibility component," which means, roughly speaking, it serves as a translator. An "operating system" is itself a program that manages the resources of the computer, allocating those resources to other programs as needed. The IBM System 370 family of computers, for which CA-SCHEDULER was created, is, depending upon the computer's size, designed to contain one of three operating systems: DOS/VSE, MVS, or CMS. As the district court noted, the general rule is that "a program written for one operating system, e.g., DOS/VSE, will not, without modification, run under another operating system such as MVS." *Computer Assocs.*, 775 F.Supp. at 550. ADAPTER's function is to translate the language of a given program into the particular language that the computer's own operating system can understand.

The district court succinctly outlined the manner in which ADAPTER works within the context of the larger program. In order to enable CA-SCHEDULER to function on different operating systems, CA divided the CA-SCHEDULER into two components:

> — a first component that contains only the task-specific portions of the program, independent of all operating system issues, and
>
> — a second component that contains all the interconnections between the first component and the operating system.
>
> In a program constructed in this way, whenever the first, task-specific, component needs to ask the operating system for some resource through a "system call", it calls the second component instead of calling the operating system directly.
>
> The second component serves as an "interface" or "compatibility component" between the task-specific portion of the program and the operating system. It receives the request from the first component and translates it into the appropriate system call that will be recognized by whatever operating system is installed on the computer, e.g., DOS/VSE, MVS, or CMS. Since the first, task-specific component calls the adapter component rather than the operating system, the first component need not be customized to use any specific operating system. The second, interface, component insures that all the system calls are performed properly for the particular operating system in use.

Id. at 551. ADAPTER serves as the second, "common system interface" component referred to above.

A program like ADAPTER, which allows a computer user to change or use multiple operating systems while maintaining the same software, is highly desirable. It saves the user the costs, both in time and money, that otherwise would be expended in purchasing new programs, modifying

existing systems to run them, and gaining familiarity with their operation. The benefits run both ways. The increased compatibility afforded by an ADAPTER-like component, and its resulting popularity among consumers, makes whatever software in which it is incorporated significantly more marketable.

Starting in 1982, Altai began marketing its own job scheduling program entitled ZEKE. The original version of ZEKE was designed for use in conjunction with a VSE operating system. By late 1983, in response to customer demand, Altai decided to rewrite ZEKE so that it could be run in conjunction with an MVS operating system.

At that time, James P. Williams ("Williams"), then an employee of Altai and now its President, approached Claude F. Arney, III ("Arney"), a computer programmer who worked for CA. Williams and Arney were longstanding friends, and had in fact been co-workers at CA for some time before Williams left CA to work for Altai's predecessor. Williams wanted to recruit Arney to assist Altai in designing an MVS version of ZEKE.

At the time he first spoke with Arney, Williams was aware of both the CA-SCHEDULER and ADAPTER programs. However, Williams was not involved in their development and had never seen the codes of either program. When he asked Arney to come work for Altai, Williams did not know that ADAPTER was a component of CA-SCHEDULER.

Arney, on the other hand, was intimately familiar with various aspects of ADAPTER. While working for CA, he helped improve the VSE version of ADAPTER, and was permitted to take home a copy of ADAPTER'S source code. This apparently developed into an irresistible habit, for when Arney left CA to work for Altai in January, 1984, he took with him copies of the source code for both the VSE and MVS versions of ADAPTER. He did this in knowing violation of the CA employee agreements that he had signed.

Once at Altai, Arney and Williams discussed design possibilities for adapting ZEKE to run on MVS operating systems. Williams, who had created the VSE version of ZEKE, thought that approximately 30% of his original program would have to be modified in order to accommodate MVS. Arney persuaded Williams that the best way to make the needed modifications was to introduce a "common system interface" component into ZEKE. He did not tell Williams that his idea stemmed from his familiarity with ADAPTER. They decided to name this new component-program OSCAR.

Arney went to work creating OSCAR at Altai's offices using the ADAPTER source code. The district court accepted Williams' testimony that no one at Altai, with the exception of Arney, affirmatively knew that Arney had the ADAPTER code, or that he was using it to create OSCAR/VSE. However, during this time period, Williams' office was adjacent to Arney's. Williams testified that he and Arney "conversed quite frequently" while Arney was "investigating the source code of ZEKE" and that Arney was in his office "a number of times daily, asking questions." In three months, Arney successfully completed the OSCAR/VSE project. In an additional month he developed an OSCAR/MVS version. When the dust finally settled, Arney had copied approximately 30% of OSCAR's code from CA's ADAPTER program.

The first generation of OSCAR programs was known as OSCAR 3.4. From 1985 to August 1988, Altai used OSCAR 3.4 in its ZEKE product, as well as in programs entitled ZACK and ZEBB. In late July 1988, CA first learned that Altai may have appropriated parts of ADAPTER. After confirming its suspicions, CA secured copyrights on its 2.1 and 7.0 versions of CA-SCHEDULER. CA then brought this copyright and trade secret misappropriation action against Altai.

Apparently, it was upon receipt of the summons and complaint that Altai first learned that Arney had copied much of the OSCAR code from ADAPTER. After Arney confirmed

to Williams that CA's accusations of copying were true, Williams immediately set out to survey the damage. Without ever looking at the ADAPTER code himself, Williams learned from Arney exactly which sections of code Arney had taken from ADAPTER.

Upon advice of counsel, Williams initiated OSCAR's rewrite. The project's goal was to save as much of OSCAR 3.4 as legitimately could be used, and to excise those portions which had been copied from ADAPTER. Arney was entirely excluded from the process, and his copy of the ADAPTER code was locked away. Williams put eight other programmers on the project, none of whom had been involved in any way in the development of OSCAR 3.4. Williams provided the programmers with a description of the ZEKE operating system services so that they could rewrite the appropriate code. The rewrite project took about six months to complete and was finished in mid-November 1989. The resulting program was entitled OSCAR 3.5.

From that point on, Altai shipped only OSCAR 3.5 to its new customers. Altai also shipped OSCAR 3.5 as a "free upgrade" to all customers that had previously purchased OSCAR 3.4. While Altai and Williams acted responsibly to correct Arney's literal copying of the ADAPTER program, copyright infringement had occurred.

After CA originally instituted this action in the United States District Court for the District of New Jersey, the parties stipulated its transfer in March, 1989, to the Eastern District of New York where it was assigned to Judge Jacob Mishler. On October 26, 1989, Judge Mishler transferred the case to Judge Pratt who was sitting in the district court by designation. Judge Pratt conducted a six day trial from March 28 through April 6, 1990. He entered judgment on August 12, 1991, and this appeal followed.

DISCUSSION

While both parties originally appealed from different aspects of the district court's judgment, Altai has now

abandoned its appellate claims. In particular, Altai has conceded liability for the copying of ADAPTER into OSCAR 3.4 and raises no challenge to the award of $364,444 in damages on that score. Thus, we address only CA's appeal from the district court's rulings that: (1) Altai was not liable for copyright infringement in developing OSCAR 3.5; and (2) in developing both OSCAR 3.4 and 3.5, Altai was not liable for misappropriating CA's trade secrets.

CA makes two arguments. First, CA contends that the district court applied an erroneous method for determining whether there exists substantial similarity between computer programs, and thus, erred in determining that OSCAR 3.5 did not infringe the copyrights held on the different versions of its CA-SCHEDULER program. CA asserts that the test applied by the district court failed to account sufficiently for a computer program's non-literal elements. Second, CA maintains that the district court erroneously concluded that its state law trade secret claims had been preempted by the federal Copyright Act. *See* 17 U.S.C. § 301(a). We shall address each argument in turn.

I. COPYRIGHT INFRINGEMENT

[1, 2] In any suit for copyright infringement, the plaintiff must establish its ownership of a valid copyright, and that the defendant copied the copyrighted work. *See Novelty Textile Mills, Inc. v. Joan Fabrics Corp.*, 558 F.2d 1090, 1092 (2d Cir.1977); see also 3 Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 13.01, at 13–4 (1991) (hereinafter "Nimmer"). The plaintiff may prove defendant's copying either by direct evidence or, as is most often the case, by showing that (1) the defendant had access to the plaintiff's copyrighted work and (2) that defendant's work is substantially similar to the plaintiff's copyrightable material. *See Walker v. Time Life Films, Inc.*, 784 F.2d 44, 48 (2d Cir.), *cert. denied*, 476 U.S. 1159, 106 S.Ct. 2278, 90 L.Ed.2d 721 (1986).

For the purpose of analysis, the district court assumed that Altai had access to the ADAPTER code when creating

OSCAR 3.5. See Computer Assocs., 775 F.Supp. at 558. Thus, in determining whether Altai had unlawfully copied protected aspects of CA's ADAPTER, the district court narrowed its focus of inquiry to ascertaining whether Altai's OSCAR 3.5 was substantially similar to ADAPTER. Because we approve Judge Pratt's conclusions regarding substantial similarity, our analysis will proceed along the same assumption.

[3] As a general matter, and to varying degrees, copyright protection extends beyond a literary work's strictly textual form to its non-literal components. As we have said, "[i]t is of course essential to any protection of literary property . . . that the right cannot be limited literally to the text, else a plagiarist would escape by immaterial variations." *Nichols v. Universal Pictures Co.*, 45 F.2d 119, 121 (2d Cir.1930) (L. Hand, J.), *cert. denied*, 282 U.S. 902, 51 S.Ct. 216, 75 L.Ed. 795 (1931). Thus, where "the fundamental essence or structure of one work is duplicated in another," 3 Nimmer, § 13.03[A][1], at 13-24, courts have found copyright infringement. *See, e.g., Horgan v. Macmillan*, 789 F.2d 157, 162 (2d Cir.1986) (recognizing that a book of photographs might infringe ballet choreography); *Twentieth Century-Fox Film Corp. v. MCA, Inc.*, 715 F.2d 1327, 1329 (9th Cir.1983) (motion picture and television series); *Sid & Marty Krofft Television Prods., Inc. v. McDonald 's Corp.*, 562 F.2d 1157, 1167 (9th Cir.1977) (television commercial and television series); *Sheldon v. Metro-Goldwyn Pictures Corp.*, 81 F.2d 49, 55 (2d Cir.), *cert. denied*, 298 U.S. 669, 56 S.Ct. 835, 80 L.Ed. 1392 (1936) (play and motion picture); *accord Stewart v. Abend*, 495 U.S. 207, 238, 110 S.Ct. 1750, 1769, 109 L.Ed.2d 184 (1990) (recognizing that motion picture may infringe copyright in book by using its "unique setting, characters, plot, and sequence of events"). This black letter proposition is the springboard for our discussion.

A. Copyright Protection for the Non-literal Elements of Computer Programs

[4] It is now well settled that the literal elements of computer programs, i.e., their source and object codes, are the

subject of copyright protection. *See Whelan*, 797 F.2d at 1233 (source and object code); *CMS Software Design Sys., Inc. v. Info Designs, Inc.*, 785 F.2d 1246, 1247 (5th Cir.1986) (source code); *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1249 (3d Cir.1983), *cert. dismissed*, 464 U.S. 1033, 104 S.Ct. 690, 79 L.Ed.2d 158 (1984) (source and object code); *Williams Elecs., Inc. v. Artic Int'l, Inc.*, 685 F.2d 870, 876-77 (3d Cir.1982) (object code). Here, as noted earlier, Altai admits having copied approximately 30% of the OSCAR 3.4 program from CA's ADAPTER source code, and does not challenge the district court's related finding of infringement.

In this case, the hotly contested issues surround OSCAR 3.5. As recounted above, OSCAR 3.5 is the product of Altai's carefully orchestrated rewrite of OSCAR 3.4. After the purge, none of the ADAPTER source code remained in the 3.5 version; thus, Altai made sure that the literal elements of its revamped OSCAR program were no longer substantially similar to the literal elements of CA's ADAPTER.

According to CA, the district court erroneously concluded that Altai's OSCAR 3.5 was not substantially similar to its own ADAPTER program. CA argues that this occurred because the district court "committed legal error in analyzing [its] claims of copyright infringement by failing to find that copyright protects expression contained in the non-literal elements of computer software." We disagree.

CA argues that, despite Altai's rewrite of the OSCAR code, the resulting program remained substantially similar to the *structure* of its ADAPTER program. As discussed above, a program's structure includes its non-literal components such as general flow charts as well as the more specific organization of inter-modular relationships, parameter lists, and macros. In addition to these aspects, CA contends that OSCAR 3.5 is also substantially similar to ADAPTER with respect to the list of services that both ADAPTER and OSCAR obtain from their respective operating systems. We

must decide whether and to what extent these elements of computer programs are protected by copyright law.

The statutory terrain in this area has been well explored. *See Lotus Dev. Corp. v. Paperback Software Int'l*, 740 F.Supp. 37, 47-51 (D.Mass.1990); *see also Whelan*, 797 F.2d at 1240-42; Englund, at 885-90; Spivack, at 731-37. The Copyright Act affords protection to "original works of authorship fixed in any tangible medium of expression. . . ." 17 U.S.C. § 102(a). This broad category of protected "works" includes "literary works," *id.* at § 102(a)(1), which are defined by the Act as

> works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film tapes, disks, or cards, in which they are embodied.

17 U.S.C. § 101. While computer programs are not specifically listed as part of the above statutory definition, the legislative history leaves no doubt that Congress intended them to be considered literary works. *See* H.R.Rep. No. 1476, 94th Cong., 2d Sess. 54, *reprinted in* 1976 U.S.C.C.A.N. 5659, 5667 (*hereinafter* "House Report"); *Whelan*, 797 F.2d at 1234; *Apple Computer*, 714 F.2d at 1247.

The syllogism that follows from the foregoing premises is a powerful one: if the non-literal structures of literary works are protected by copyright; and if computer programs are literary works, as we are told by the legislature; then the non-literal structures of computer programs are protected by copyright. *See Whelan*, 797 F.2d at 1234 ("By analogy to other literary works, it would thus appear that the copyrights of computer programs can be infringed even absent copying of the literal elements of the program."). We have no reservation in joining the company of those courts that have already ascribed to this logic. *See, e.g., Johnson Controls, Inc. v. Phoenix Control Sys., Inc.*, 886 F.2d 1173, 1175 (9th Cir. 1989); *Lotus Dev. Corp.*, 740 F.Supp. at 54; *Digital Communications Assocs., Inc. v. Softklone Distrib. Corp.*, 659 F.Supp. 449, 455-56 (N.D.

Ga.1987); *Q-Co. Industries, Inc. v. Hoffman*, 625 F.Supp. 608, 615 (S.D.N.Y.1985); *SAS Inst., Inc. v. S & H Computer Sys., Inc.*, 605 F.Supp. 816, 829-30 (M.D.Tenn.1985). However, that conclusion does not end our analysis. We must determine the scope of copyright protection that extends to a computer program's non-literal structure.

[5] As a caveat, we note that our decision here does not control infringement actions regarding categorically distinct works, such as certain types of screen displays. These items represent products of computer programs, rather than the programs themselves, and fall under the copyright rubric of audiovisual works. If a computer audiovisual display is copyrighted separately as an audiovisual work, apart from the literary work that generates it (i.e., the program), the display may be protectable regardless of the underlying program's copyright status. *See Stern Elecs., Inc. v. Kaufman*, 669 F.2d 852, 855 (2d Cir. 1982) (explaining that an audiovisual works copyright, rather than a copyright on the underlying program, extended greater protection to the sights and sounds generated by a computer video game because the same audiovisual display could be generated by different programs). Of course, the copyright protection that these displays enjoy extends only so far as their expression is protectable. *See Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 209 (9th Cir. 1988). In this case, however, we are concerned not with a program's display, but the program itself, and then with only its non-literal components. In considering the copyrightability of these components, we must refer to venerable doctrines of copyright law.

1) Idea vs. Expression Dichotomy

It is a fundamental principal of copyright law that a copyright does not protect an idea, but only the expression of the idea. *See Baker v. Selden*, 101 U.S. 99, 25 L.Ed. 841(1879); *Mazer v. Stein*, 347 U.S. 201, 217, 74 S.Ct. 460, 470, 98 L.Ed. 630 (1954). This axiom of common law has been incorporated into the governing statute. Section 102(b) of the Act provides:

> In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.

17 U.S.C. § 102(b). *See also House Report*, at 5670 ("Copyright does not preclude others from using ideas or information revealed by the author's work.").

Congress made no special exception for computer programs. To the contrary, the legislative history explicity states that copyright protects computer programs only "to the extent that they incorporate authorship in programmer's expression of original ideas, as distinguished from the ideas themselves." *Id.* At 5667; *see also id.* At 5670 ("Section 102(b) is intended . . . to make clear that the expression adopted by the programmer is the copyrightable element in a computer program, and that the actual processes or methods embodied in the program are not within the scope of copyright law.").

Similarly, the National Commission on New Technological Uses of Copyrighted Works ("CONTU") established by Congress to survey the issues generated by the interrelationship of advancing technology and copyright law, *see* Pub.L. No. 93-573, § 201, 88 Stat. 1873 (1974), recommended, *inter alia*, that the 1976 Copyright Act "be amended . . . to make it explicit that computer programs, to the extent that they embody the author's original creation, are proper subject matter for copyright." *See* National Commission on New Technological Uses of Copyrighted Works, *Final Report* 1 (1979) (hereinafter "*CONTU Report*"). To that end, Congress adopted CONTU's suggestions and amended the Copyright Act by adding, among other things, a provision to 17 U.S.C. § 101 which defined the term "computer program." *See* Pub.L. No. 96-517, § 10(a), 94 Stat. 3028 (1980). CONTU also "concluded that the idea-expression distinction should be used to determine which

aspects of computer programs are copyrightable." *Lotus Dev. Corp.*, 740 F.Supp. at 54 (citing *CONTU Report*, at 44).

Drawing the line between idea and expression is a tricky business. Judge Learned Hand noted that "[n]obody has ever been able to fix that boundary, and nobody ever can." *Nichols*, 45 F.2d at 121. Thirty years later his convictions remained firm. "Obviously, no principle can be stated as to when an imitator has gone beyond copying the 'idea,' and has borrowed its 'expression,'" Judge Hand concluded. "Decisions must therefore inevitably be *ad hoc*." *Peter Pan Fabrics, Inc. v. Martin Weiner Corp.*, 274 F.2d 487, 489 (2d Cir. 1960).

The essentially utilitarian nature of a computer program further complicates the task of distilling its idea from its expression. *See SAS Inst.*, 605 F.Supp. at 829; *cf.* Englund, at 893. In order to describe both computational processes and abstract ideas, its content "combines creative and technical expression." *See* Spivack, at 755. The variations of expression found in purely creative compositions, as opposed to those contained in utilitarian works, are not directed towards practical application. For example, a narration of Humpty Dumpty's demise, which would clearly be a creative composition, does not serve the same ends as, say, a recipe for scrambled eggs—which is a more process oriented text. Thus, compared to aesthetic works, computer programs hover even more closely to the elusive boundary line described in § 102(b).

The doctrinal starting point in analyses of utilitarian works, is the seminal case of *Baker v. Selden*, 101 U.S. 99, 25 L.Ed. 841 (1879). In *Baker*, the Supreme Court faced the question of "whether the exclusive property in a system of bookkeeping can be claimed, under the law of copyright, by means of a book in which that system is explained?" *Id.* at 101. Selden had copyrighted a book that expounded a particular method of bookkeeping. The book contained lined pages with headings intended to illustrate the manner in which the system operated. Baker's accounting publication

included ledger sheets that employed "substantially the same ruled lines and headings. . . ." *Id.* Selden's testator sued Baker for copyright infringement on the theory that the ledger sheets were protected by Selden's copyright.

The Supreme Court found nothing copyrightable in Selden's bookkeeping system, and rejected his infringement claim regarding the ledger sheets. The Court held that:

> The fact that the art described in the book by illustrations of lines and figures which are reproduced in practice in the application of the art, makes no difference. Those illustrations are the mere language employed by the author to convey his ideas more clearly. Had he used words of description instead of diagrams (which merely stand in the place of words), there could not be the slightest doubt that others, applying the art to practical use, might lawfully draw the lines and diagrams which were in the author's mind, and which he thus described by words in his book.
>
> The copyright of a work on mathematical science cannot give to the author an exclusive right to the methods of operation which he propounds, or to the diagrams which he employs to explain them, so as to prevent an engineer from using them whenever occasion requires.

Id. at 103.

To the extent that an accounting text and a computer program are both "a set of statements or instructions . . . to bring about a certain result," 17 U.S.C. § 101, they are roughly analogous. In the former case, the processes are ultimately conducted by human agency; in the latter, by electronic means. In either case, as already stated, the processes themselves are not protectable. But the holding in *Baker* goes farther. The Court concluded that those aspects of a work, which "must necessarily be used as incident to" the idea, system or process that the work describes, are also not copyrightable. 101 U.S. at 104. Selden's ledger sheets, therefore, enjoyed no copyright protection because they were "necessary incidents to" the system of accounting that he

described. *Id.* at 103. From this reasoning, we conclude that those elements of a computer program that are necessarily incidental to its function are similarly unprotectable.

While *Baker v. Selden* provides a sound analytical foundation, it offers scant guidance on how to separate idea or process from expression, and moreover, on how to further distinguish protectable expression from that expression which "must necessarily be used as incident to" the work's underlying concept. In the context of computer programs, the Third Circuit's noted decision in *Whelan* has, thus far, been the most thoughtful attempt to accomplish these ends.

The court in *Whelan* faced substantially the same problem as is presented by this case. There, the defendant was accused of making off with the non-literal structure of the plaintiff's copyrighted dental lab management program, and employing it to create its own competitive version. In assessing whether there had been an infringement, the court had to determine which aspects of the programs involved were ideas, and which were expression. In separating the two, the court settled upon the following conceptual approach:

> [T]he line between idea and expression may be drawn with reference to the end sought to be achieved by the work in question. In other words, *the purpose or function of a utilitarian work would be the work's idea, and everything that is not necessary to that purpose or function would be part of the expression of the idea. . . .* Where there are various means of achieving the desired purpose, then the particular means chosen is not necessary to the purpose; hence, there is expression, not idea.

797 F.2d at 1236 (citations omitted). The "idea" of the program at issue in *Whelan* was identified by the court as simply "the efficient management of a dental laboratory." *Id.* at n. 28.

So far, in the courts, the *Whelan* rule has received a mixed reception. While some decisions have adopted its reasoning, *see, e.g., Bull HN Info. Sys., Inc. v. American Express Bank, Ltd.*, 1990 Copyright Law Dec. (CCH) ¶ 26,555 at 23,278, 1990 WL

48098 (S.D.N.Y.1990); *Dynamic Solutions, Inc. & Planning & Control, Inc.*, 1987 Copyright Law Dec. (CCH) ¶ 26,062 at 20,912, 1987 WL 6419 (S.D.N.Y.1987); *Broderbund Software Inc. v. Unison World, Inc.*, 648 F.Supp. 1127, 1133 (N.D.Cal.1986), others have rejected it, *see Plains Cotton Co-op v. Goodpasture Computer Serv., Inc.*, 807 F.2d 1256, 1262 (5th Cir.), *cert. denied*, 484 U.S. 821, 108 S.Ct. 80, 98 L.Ed.2d 42 (1987); cf. *Synercom Technology, Inc. v. University Computing Co.*, 462 F.Supp. 1003, 1014 (N.D.Tex.1978) (concluding that order and sequence of data on computer input formats was idea not expression).

Whelan has fared even more poorly in the academic community, where its standard for distinguishing idea from expression has been widely criticized for being conceptually overbroad. *See, e.g.*, Englund, at 881; Menell, at 1074, 1082; Kretschmer, at 837-39; Spivack, at 747-55; Thomas M. Gage, Note, Whelan Associates v. Jaslow Dental Laboratories: *Copyright Protection for Computer Software Structure—What's the Purpose?*, 1987 WIS. L.REV. 859, 860-61 (1987). The leading commentator in the field has stated that "[t]he crucial flaw in [Whelan's] reasoning is that it assumes that only one 'idea,' in copyright law terms, underlies any computer program, and that once a separable idea can be identified, everything else must be expression." 3 Nimmer § 13.03(F), at 13-62.34. This criticism focuses not upon the program's ultimate purpose but upon the reality of its structural design. As we have already noted, a computer program's ultimate function or purpose is the composite result of interacting subroutines. Since each subroutine is itself a program, and thus, may be said to have its own "idea," *Whelan's* general formulation that a program's overall purpose equates with the program's idea is descriptively inadequate.

Accordingly, we think that Judge Pratt wisely declined to follow *Whelan*. *See Computer Assocs.*, 775 F.Supp. at 558-60. In addition to noting the weakness in the *Whelan* definition of "program-idea," mentioned above, Judge Pratt found that

Whelan's synonymous use of the terms "structure, sequence, and organization," *see Whelan*, 797 F.2d at 1224 n. 1, demonstrated a flawed understanding of a computer program's method of operation. *See Computer Assocs.*, 775 F.Supp. at 559-60 (discussing the distinction between a program's "static structure" and "dynamic structure"). Rightly, the district court found Whelan 's rationale suspect because it is so closely tied to what can now be seen—with the passage of time—as the opinion's somewhat outdated appreciation of computer science.

2) Substantial Similarity Test for Computer Program Structure: Abstraction-Filtration-Comparison

We think that *Whelan's* approach to separating idea from expression in computer programs relies too heavily on metaphysical distinctions and does not place enough emphasis on practical considerations. *Cf. Apple Computer*, 714 F.2d at 1253 (rejecting certain commercial constraints on programming as a helpful means of distinguishing idea from expression because they did "not enter into the somewhat metaphysical issue of whether particular ideas and expressions have merged"). As the cases that we shall discuss demonstrate, a satisfactory answer to this problem cannot be reached by resorting, *a priori*, to philosophical first principals.

[6] As discussed herein, we think that district courts would be well-advised to undertake a three-step procedure, based on the abstractions test utilized by the district court, in order to determine whether the non-literal elements of two or more computer programs are substantially similar. This approach breaks no new ground; rather, it draws on such familiar copyright doctrines as merger, *scenes a faire*, and public domain. In taking this approach, however, we are cognizant that computer technology is a dynamic field which can quickly outpace judicial decisionmaking. Thus, in cases where the technology in question does not allow for a literal application of the procedure we outline below, our opinion should not be read to foreclose the district courts of our circuit from utilizing a modified version.

In ascertaining substantial similarity under this approach, a court would first break down the allegedly infringed program into its constituent structural parts. Then, by examining each of these parts for such things as incorporated ideas, expression that is necessarily incidental to those ideas, and elements that are taken from the public domain, a court would then be able to sift out all non-protectable material. Left with a kernel, or possible kernels, of creative expression after following this process of elimination, the court's last step would be to compare this material with the structure of an allegedly infringing program. The result of this comparison will determine whether the protectable elements of the programs at issue are substantially similar so as to warrant a finding of infringement. It will be helpful to elaborate a bit further.

Step One: Abstraction

As the district court appreciated, *see Computer Assocs.*, 775 F.Supp. at 560, the theoretic framework for analyzing substantial similarity expounded by Learned Hand in the *Nichols* case is helpful in the present context. In *Nichols*, we enunciated what has now become known as the "abstractions" test for separating idea from expression:

> Upon any work . . . a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the [work] is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the [author] could prevent the use of his "ideas," to which, apart from their expression, his property is never extended.

Nichols, 45 F.2d at 121.

While the abstractions test was originally applied in relation to literary works such as novels and plays, it is adaptable to computer programs. In contract to the *Whelan*

approach, the abstractions test "implicitly recognizes that any given work may consist of a mixture of numerous ideas and expressions." 3 Nimmer § 13.03[F], at 13-62. 34-63.

As applied to computer programs, the abstractions test will comprise the first step in the examination for substantial similarity. Initially, in a manner that resembles reverse engineering on a theoretical plane, a court should dissect the allegedly copied program's structure and isolate each level of abstraction contained within it. This process begins with the code and ends with an articulation of the program's ultimate function. Along the way, it is necessary essentially to retrace and map each of the designer's steps—in the opposite order in which they were taken during the program's creation. *See* Background: Computer Program Design, *supra*.

As an anatomical guide to this procedure, the following description is helpful:

> At the lowest level of abstraction, a computer program may be thought of in its entirety as a set of individual instructions organized into a hierarchy of modules. At a higher level of abstraction, the instruction in the lowest-level modules may be replaced conceptually by the functions of those modules. At progressively higher levels of abstraction, the function of higher-level modules conceptually replace the implementations of those modules in terms of lower-level module and instructions, until finally, one is left with nothing but the ultimate function of the program . . . . A program has structure at every level of abstraction at which it is viewed. At low levels of abstraction, a program's structure may be quite complex; at the highest level it is trivial.

Englund, at 897-98; *cf.* Spivack, at 774.

Step Two: Filtration

Once the program's abstraction levels have been discovered, the substantial similarity inquiry moves from the conceptual to the concrete. Professor Nimmer suggests, and we endorse, a "successive filtering method" for separating protectable expression from non-protectable material. *See generally* 3 Nimmer § 13.03[F]. This process entails examining the structural components at each level of abstraction to determine whether their particular inclusion at that level was "idea" or was dictated by considerations of efficiency, so as to be necessarily incidental to that idea; required by factors external to the program itself; or taken from the public domain and hence is nonprotectable expression. *See also* Kretschmer, at 844-45 (arguing that program features dictated by market externalities or efficiency concerns are unprotectable). The structure of any given program may reflect some, all, or none of these considerations. Each case requires its own fact specific investigation.

Strictly speaking, this filtration serves "the purpose of defining the scope of plaintiff's copyright." *Brown Bag Software v. Symantec Corp.*, 960 F.2d 1465, 1475 (9th Cir.) (endorsing "analytic dissection" of computer programs in order to isolate protectable expression), *cert. denied*, — U.S. —, 113 S.Ct. 198, 121 L.Ed.2d 141 (1992). By applying well developed doctrines of copyright law, it may ultimately leave behind a "core of protectable material." 3 Nimmer § 13.03[F][5], at 13-72. Further explication of this second step may be helpful.

(a) *Elements Dictated by Efficiency*

The portion of *Baker v. Selden*, discussed earlier, which denies copyright protection to expression necessarily incidental to the idea being expressed, appears to be the cornerstone for what has developed into the doctrine of merger. *See Morrissey v. Proctor & Gamble Co.*, 379 F.2d 675, 678-79 (1st Cir.1967) (relying on *Baker* for the proposition that expression embodying the rules of a sweepstakes contest was inseparable

from the idea of the contest itself, and therefore were not protectable by copyright); *see also Digital Communications*, 659 F.Supp. at 457. The doctrine's underlying principle is that "[w]hen there is essentially only one way to express an idea, the idea and its expression are inseparable and copyright is no bar to copying that expression." *Concrete Machinery Co. v. Classic Lawn Ornaments, Inc.*, 843 F.2d 600, 606 (1st Cir.1988). Under these circumstances, the expression is said to have "merged" with the idea itself. In order not to confer a monopoly of the idea upon the copyright owner, such expression should not be protected. *See Herbert Rosenthal Jewelry Corp. v. Kalpakian*, 446 F.2d 738, 742 (9th Cir.1971).

CONTU recognized the applicability of the merger doctrine to computer programs. In its report to Congress it stated that:

> [C]opyrighted language may be copied without infringing when there is but a limited number of ways to express a given idea. . . . In the computer context, this means that when specific instructions, even though previously copyrighted, are the only and essential means of accomplishing a given task, their later use by another will not amount to infringement.

CONTU Report, at 20. While this statement directly concerns only the application of merger to program code, that is, the textual aspect of the program, it reasonably suggests that the doctrine fits comfortably within the general context of computer programs.

Furthermore, when one considers the fact that programmers generally strive to create programs "that meet the user's needs in the most efficient manner," Menell, at 1052, the applicability of the merger doctrine to computer programs becomes compelling. In the context of computer program design, the concept of efficiency is akin to deriving the most concise logical proof or formulating the most succinct mathematical computation. Thus, the more efficient a set of modules are, the more closely they approximate the

idea or process embodied in that particular aspect of the program's structure.

While, hypothetically, there might be a myriad of ways in which a programmer may effectuate certain functions within a program,—i.e., express the idea embodied in a given subroutine—efficiency concerns may so narrow the practical range of choice as to make only one or two forms of expression workable options. *See* 3 Nimmer § 13.03[F][2], at 13-63; *see also Whelan*, 797 F.2d at 1243 n. 43 ("It is true that for certain tasks there are only a very limited number of file structures available, and in such cases the structures might not be copyrightable. . . ."). Of course, not all program structure is informed by efficiency concerns. *See* Menell, at 1052 (besides efficiency, simplicity related to user accommodation has become a programming priority). It follows that in order to determine whether the merger doctrine precludes copyright protection to an aspect of a program's structure that is so oriented, a court must inquire "whether the use of *this particular set* of modules is necessary efficiently to implement that part of the program's process" being implemented. Englund, at 902. If the answer is yes, then the expression represented by the programmer's choice of a specific module or group of modules has merged with their underlying idea and is unprotected. *Id.* at 902-03.

Another justification for linking structural economy with the application of the merger doctrine stems from a program's essentially utilitarian nature and the competitive forces that exist in the software marketplace. *See* Kretschmer, at 842. Working in tandem, these factors give rise to a problem of proof which merger helps to eliminate.

Efficiency is an industry-wide goal. Since, as we have already noted, there may be only a limited number of efficient implementations for any given program task, it is quite possible that multiple programmers, working independently, will design the identical method employed in the allegedly infringed work. Of course, if this is the case, there is no copyright infringement. *See Roth Greeting Cards v. United*

Card Co., 429 F.2d 1106, 1110 (9th Cir. 1970); *Sheldon*, 81 F.2d at 54.

[7] Under these circumstances, the fact that two programs contain the same efficient structure may as likely lead to an inference of independent creation as it does to one of copying. *See* 3 Nimmer § 13.03[F][2], at 13-65; *cf. Herbert Rosenthal Jewelry Corp.*, 446 F.2d at 741 (evidence of independent creation may stem from defendant's standing as a designer of previous similar works). Thus, since evidence of similarly efficient structure is not particularly probative of copying, it should be disregarded in the overall substantial similarity analysis. *See* 3 Nimmer § 13.03[F][2], at 13-65.

We find support for applying the merger doctrine in cases that have already addressed the question of substantial similarity in the context of computer program structure. Most recently, in *Lotus Dev. Corp.*, 740 F.Supp. at 66, the district court had before it a claim of copyright infringement relating to the structure of a computer spreadsheet program. The court observed that "the basic spreadsheet screen display that resembles a rotated 'L' . . . , if not present in every expression of such a program, is present in most expressions." *Id.* Similarly, the court found that "an essential detail present in most if not all expressions of an electronic spreadsheet—is the designation of a particular key that, when pressed, will invoke the menu command system." *Id.* Applying the merger doctrine, the court denied copyright protection to both program elements.

In *Manufacturers Technologies, Inc. v. Cans, Inc.*, 706 F.Supp. 984, 995-99 (D.Conn.1989), the infringement claims stemmed from various alleged program similarities "as indicated in their screen displays." *Id.* At 990. Stressing efficiency concerns in the context of a merger analysis, the court determined that the program's method of allowing the user to navigate within the screen displays was not protectable because, in part, "the process or manner of navigating internally on any specific screen displays . . . is limited in the

number of ways it may be simply achieved to facilitate user comfort." *Id.* at 995.

The court also found that expression contained in various screen displays (in the form of alphabetical and numerical columns) was not the proper subject of copyright protection because it was "necessarily incident to the idea[s]" embodied in the displays. *Id.* at 996-97. *Cf. Digital Communications*, 659 F.Supp. at 460 (finding no merger and affording copyright protection to program's status screen display because "modes of expression chosen . . . are clearly not necessary to the idea of the status screen").

We agree with the approach taken in these decisions, and conclude that application of the merger doctrine in this setting is an effective way to eliminate non-protectable expression contained in computer programs.

(b) *Elements Dictated By External Factors*

We have stated that where "it is virtually impossible to write about a particular historical era or fictional theme without employing certain 'stock' or standard literary devices," such expression is not copyrightable. *Hoehling v. Universal City Studios, Inc.*, 618 F.2d 972, 979 (2d Cir.), *cert. denied*, 449 U.S. 841, 101 S.Ct. 121, 66 L.Ed.2d 49 (1980). For example, the *Hoehling* case was an infringement suit stemming from several works on the Hindenberg disaster. There we concluded that similarities in representations of German beer halls, scenes depicting German greetings such as "Heil Hitler," or the singing of certain German songs would not lead to a finding of infringement because they were "'indispensable, or at least standard, in the treatment of'" life in Nazi Germany. *Id.* (quoting *Alexander v. Haley*, 460 F.Supp. 40, 45 (S.D.N.Y.1978)). This is known as the *scenes a faire* doctrine, and like "merger," it has its analogous application to computer programs. *Cf. Data East USA*, 862 F.2d at 208 (applying *scenes a faire* to a home computer video game).

Professor Nimmer points out that "in many instances it is virtually impossible to write a program to perform particular

functions in a specific computing environment without employing standard techniques." 3 Nimmer § 13.03[F][3], at 13-65. This is a result of the fact that a programmer's freedom of design choice is often circumscribed by extrinsic considerations such as (1) the mechanical specifications of the computer on which a particular program is intended to run; (2) compatibility requirements of other programs with which a program is designed to operate in conjunction; (3) computer manufacturers' design standards; (4) demands of the industry being serviced; and (5) widely accepted programming practices within the computer industry. *Id* at 13-66-71.

Courts have already considered some of these factors in denying copyright protection to various elements of computer programs. In the Plains Cotton case, the Fifth Circuit refused to reverse the district court's denial of a preliminary injunction against an alleged program infringer because, in part, "many of the similarities between the . . . programs [were] dictated by the externalities of the cotton market." 807 F.2d at 1262.

In *Manufacturers Technologies*, the district court noted that the program's method of screen navigation "is influenced by the type of hardware that the software is designed to be used on." 706 F.Supp. at 995. Because, in part, "the functioning of the hardware package impact[ed] and constrain[ed] the type of navigational tools used in plaintiff's screen displays," the court denied copyright protection to that aspect of the program. *Id; Cf. Data East USA*, 862 F.2d at 209 (reversing a district court's finding of audiovisual work infringement because, *inter alia*, "the use of the Commodore computer for a karate game intended for home consumption is subject to various constraints inherent in the use of that computer").

Finally, the district court in *Q-Co Industries* rested its holding on what, perhaps, most closely approximates a traditional *scenes a faire* rationale. There, the court denied copyright protection to four program modules employed in a teleprompter program. This decision was ultimately based

upon the court's finding that "the same modules would be an inherent part of any prompting program." 625 F.Supp. at 616.

Building upon this existing case law, we conclude that a court must also examine the structural content of an allegedly infringed program for elements that might have been dictated by external factors.

(c) *Elements taken From the Public Domain*

Closely related to the non-protectability of *scenes a faire*, is material found in the public domain. Such material is free for the taking and cannot be appropriated by a single author even though it is included in a copyrighted work. *See E.F. Johnson Co. v. Uniden Corp. of America*, 623 F.Supp. 1485, 1499 (D.Minn.1985); *see also Sheldon*, 81 F.2d at 54. We see no reason to make an exception to this rule for elements of a computer program that have entered the public domain by virtue of freely accessible program exchanges and the like. *See* 3 Nimmer § 13.03[F][4]; *see also Brown Bag Software*, 960 F.2d at 1473 (affirming the district court's finding that " '[p]laintiffs may not claim copyright protection of an . . . expression that is, if not standard, then commonplace in the computer software industry.' "). Thus, a court must also filter out this material from the allegedly infringed program before it makes the final inquiry in its substantial similarity analysis.

Step Three: Comparison

The third and final step of the test for substantial similarity that we believe appropriate for non-literal program components entails a comparison. Once a court has sifted out all elements of the allegedly infringed program which are "ideas" or are dictated by efficiency or external factors, or taken from the public domain, there may remain a core of protectable expression. In terms of a work's copyright value, this is the golden nugget. *See Brown Bag Software*, 960 F.2d at 1475. At this point, the court's substantial similarity inquiry focuses on whether the defendant copied any aspect of this protected expression, as well as an assessment of the copied

portion's relative importance with respect to the plaintiff's overall program. *See* 3 Nimmer § 13.03[F][5]; *Data East USA*, 862 F.2d at 208 ("To determine whether similarities result from unprotectable expression, analytic dissection of *similarities* may be performed. If . . . all similarities in expression arise from use of common ideas, then no substantial similarity can be found.").

3) *Policy Considerations*

We are satisfied that the three step approach we have just outlined not only comports with, but advances the constitutional policies underlying the Copyright Act. Since any method that tries to distinguish idea from expression ultimately impacts on the scope of copyright protection afforded to a particular type of work, "the line [it draws] must be a pragmatic one, which also keeps in consideration 'the preservation of the balance between competition and protection. . . .' " *Apple Computer*, 714 F.2d at 1253 (citation omitted).

CA and some *amici* argue against the type of approach that we have set forth on the grounds that it will be a disincentive for future computer program research and development. At bottom, they claim that if programmers are not guaranteed broad copyright protection for their work, they will not invest the extensive time, energy and funds required to design and improve program structures. While they have a point, their argument cannot carry the day. The interest of the copyright law is not in simply conferring a monopoly on industrious persons, but in advancing the public welfare through rewarding artistic creativity, in a manner that permits the free use and development of non-protectable ideas and processes.

In this respect, our conclusion is informed by Justice Stewart's concise discussion of the principles that correctly govern the adaptation of the copyright law to new circumstances. *In Twentieth Century Music Corp. v. Aiken*, he wrote:

> The limited scope of the copyright holder's statutory monopoly, like the limited copyright duration required by the Constitution, reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts.

The immediate effect of our copyright law is to secure a fair return for an "author's" creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good. . . . When technological change has rendered its literal terms ambiguous, the Copyright Act must be construed in light of this basic purpose.

422 U.S. 151, 156, 95 S.Ct. 2040, 2043-44, 45 L.Ed.2d 84 (1975) (citations and footnotes omitted).

Recently, the Supreme Court has emphatically reiterated that "[t]he primary objective of copyright is not to reward the *labor* of authors. . . ." *Feist Publications, Inc. v. Rural Tel. Serv. Co.*,—U.S.—,—,111 S.Ct. 1282, 1290, 113 L.Ed.2d 358 (1991) (emphasis added). While the *Feist* decision deals primarily with the copyrightability of purely factual compilations, its underlying tenets apply to much of the work involved in computer programming. *Feist* put to rest the "sweat of the brow" doctrine in copyright law. *Id.* at —, 111 S.Ct. at 1295. The rationale of that doctrine "was that copyright was a reward for the hard work that went into compiling facts." *Id.* at —, 111 S.Ct. at 1291. The Court flatly rejected this justification for extending copyright protection, noting that it "eschewed the most fundamental axiom of copyright law—that no one may copyright facts or ideas." *Id.*

Feist teaches that substantial effort alone cannot confer copyright status on an otherwise uncopyrightable work. As we have discussed, despite the fact that significant labor and expense often goes into computer program flow-charting and debugging, that process does not always result in inherently protectable expression. Thus, *Feist* implicitly undercuts the *Whelan* rationale, "which allow[ed] copyright protection

beyond the literal computer code . . . [in order to] provide the proper incentive for programmers by protecting their most valuable efforts. . . ." *Whelan*, 797 F.2d at 1237 (footnote omitted). We note that *Whelan* was decided prior to *Feist* when the "sweat of the brow" doctrine still had vitality. In view of the Supreme Court's recent holding, however, we must reject the legal basis of CA's disincentive argument.

Furthermore, we are unpersuaded that the test we approve today will lead to the dire consequences for the computer program industry that plaintiff and some *amici* predict. To the contrary, serious students of the industry have been highly critical of the sweeping scope of copyright protection engendered by the *Whelan* rule, in that it "enables first comers to 'lock up' basic programming techniques as implemented in programs to perform particular tasks." Menell, at 1087; *see also* Spivack, at 765 (*Whelan* "results in an inhibition of creation by virtue of the copyright owner's quasi-monopoly power").

To be frank, the exact contours of copyright protection for non-literal program structure are not completely clear. We trust that as future cases are decided, those limits will become better defined. Indeed, it may well be that the Copyright Act serves as a relatively weak barrier against public access to the theoretical interstices behind a program's source and object codes. This results from the hybrid nature of a computer program, which, while it is literary expression, is also a highly functional, utilitarian component in the larger process of computing.

Generally, we think that copyright registration—with its indiscriminating availability—is not ideally suited to deal with the highly dynamic technology of computer science. Thus far, many of the decisions in this area reflect the courts' attempt to fit the proverbial square peg in a round hole. The district court, *see Computer Assocs.*, 775 F.Supp. at 560, and at least one commentator have suggested that patent registration, with its exacting up-front novelty and non-obviousness requirements, might be the more appropriate

rubric of protection for intellectual property of this kind. *See* Randell M. Whitmeyer, Comment, *A Plea for Due Processes: Defining the Proper Scope of Patent Protection for Computer Software*, 85 Nw.U.L.REV. 1103, 1123-25 (1991); *see also Lotus Dev. Corp. v. Borland Int'l, Inc*, 788 F.Supp. 78, 91 (D.Mass.1992) discussing the potentially supplemental relationship between patent and copyright protection in the context of computer programs). In any event, now that more than 12 years have passed since CONTU issued its final report, the resolution of this specific issue could benefit from further legislative investigation— perhaps a CONTU II.

In the meantime, Congress has made clear that computer programs are literary works entitled to copyright protection. Of course, we shall abide by these instructions, but in so doing we must not impair the overall integrity of copyright law. While incentive based arguments in favor of broad copyright protection are perhaps attractive from a pure policy perspective, *see Lotus Dev. Corp.*, 740 F.Supp. at 58, ultimately, they have a corrosive effect on certain fundamental tenets of copyright doctrine. If the test we have outlined results in narrowing the scope of protection, as we expect it will, that result flows from applying, in accordance with Congressional intent, long-standing principles of copyright law to computer programs. Of course, our decision is also informed by our concern that these fundamental principles remain undistorted.

B. *The District Court Decision*

We turn now to our review of the district court's decision in this particular case. At the outset, we must address CA's claim that the district court erred by relying too heavily on the court appointed expert's "personal opinions on the factual and legal issues before the court."

1) Use of Expert Evidence in Determining Substantial Similarity Between Computer Programs

Pursuant to Fed.R.Evid. 706, and with the consent of both Altai and CA, Judge Pratt appointed and relied upon Dr.

Randall Davis of the Massachusetts Institute of Technology as the court's own expert witness on the issue of substantial similarity. Dr. Davis submitted a comprehensive written report that analyzed the various aspects of the computer programs at issue and evaluated the parties' expert evidence. At trial, Dr. Davis was extensively cross-examined by both CA and Altai.

[8] The well-established general rule in this circuit has been to limit the use of expert opinion in determining whether works at issue are substantially similar. As a threshold matter, expert testimony may be used to assist the fact finder in ascertaining whether the defendant had copied any part of the plaintiff's work. *See Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir.1946). To this end, "the two works are to be compared in their entirety . . . [and] in making such comparison resort may properly be made to expert analysis. . . ." 3 Nimmer §13.03[E][2], at 13-62.16.

[9] However, once some amount of copying has been established, it remains solely for the trier of fact to determine whether the copying was "illicit," that is to say, whether the "defendant took from plaintiff's works so much of what is pleasing to [lay observers] who comprise the audience for whom such [works are] composed, that defendant wrongfully appropriated something which belongs to the plaintiff." *Arnstein*, 154 F.2d at 473. Since the test for illicit copying is based upon the response of ordinary lay observers, expert testimony is thus "irrelevant" and not permitted. *Id.* at 468, 473. We have subsequently described this method of inquiry as "merely an alternative way of formulating the issue of substantial similarity." *Ideal Toy Corp. v. Fab-Lu Ltd. (Inc.)*, 360 F.2d 1021, 1023 n. 2 (2d Cir.1966).

Historically, *Arnstein*'s ordinary observer standard had its roots in "an attempt to apply the 'reasonable person' doctrine as found in other areas of the law to copyright." 3 Nimmer § 13.03[E][2], at 13 62.10-11. That approach may well have served its purpose when the material under scrutiny was limited to art forms readily comprehensible and generally

familiar to the average lay person. However, in considering the extension of the rule to the present case, we are reminded of Holmes' admonition that, "[t]he life of the law has not been logic: it has been experience." O.W. Holmes, Jr., THE COMMON LAW 1 (1881).

Thus, in deciding the limits to which expert opinion may be employed in ascertaining the substantial similarity of computer programs, we cannot disregard the highly complicated and technical subject matter at the heart of these claims. Rather, we recognize the reality that computer programs are likely to be somewhat impenetrable by lay observers—whether they be judges or juries—and, thus, seem to fall outside the category of works contemplated by those who engineered the *Arnstein* test. *Cf.: Dawson v. Hinshaw Music Inc.*, 905 F.2d 731, 737 (4th Cir.) ("departure from the lay characterization is warranted only where the intended audience possesses 'specialized expertise' "), *cert. denied*, 498 U.S. 981, 111 S.Ct. 511, 112 L.Ed.2d 523 (1990). As Judge Pratt correctly observed:

> In the context of computer programs, many of the familiar tests of similarity prove to be inadequate, for they were developed historically in the context of artistic and literary, rather than utilitarian, works.

Computer Assocs., 775 F.Supp. at 558.

In making its finding on substantial similarity with respect to computer programs, we believe that the trier of fact need not be limited by the strictures of its own lay perspective. *See Dawson*, 905 F.2d at 735; *Whelan*, 797 F.2d at 1233; *Broderbund*, 648 F.Supp. at 1136 (stating in *dictum*: "an integrated test involving expert testimony and analytic dissection may well be the wave of the future in this area. . . ."); *Brown Bag Software*, 960 F.2d at 1478-79 (Sneed, J., concurring); *see also* 3 Nimmer § 13.03[E][4]; *but see Brown Bag Software*, 960 F.2d at 1475 (applying the "ordinary reasonable person" standard in substantial similarity test for computer programs). Rather, we leave it to the discretion of the district court to decide to what

extent, if any, expert opinion, regarding the highly technical nature of computer programs, is warranted in a given case.

In so holding, we do not intend to disturb the traditional role of lay observers in judging substantial similarity in copyright cases that involve the aesthetic arts, such as music, visual works or literature.

[10] In this case, Dr. Davis' opinion was instrumental in dismantling the intricacies of computer science so that the court could formulate and apply an appropriate rule of law. While Dr. Davis' report and testimony undoubtedly shed valuable light on the subject matter of the litigation, Judge Pratt remained, in the final analysis, the trier of fact. The distnct court's use of the expert's assistance, in the context of this case, was entirely appropriate.

2) Evidentiary Analysis

[11] The district court had to determine whether Altai's OSCAR 3.5 program was substantially similar to CA's ADAPTER. We note that Judge Pratt's method of analysis effectively served as a road map for our own, with one exception—Judge Pratt filtered out the non-copyrightable aspects of OSCAR 3.5 rather than those found in ADAPTER, the allegedly infringed program. We think that our approach—i.e., filtering out the unprotected aspects of an allegedly infringed program and then comparing the end product to the structure of the suspect program—is preferable, and therefore believe that district courts should proceed in this manner in future cases.

We opt for this strategy because, in some cases, the defendant's program structure might contain protectable expression and/or other elements that are not found in the plaintiff's program. Since it is extraneous to the allegedly copied work, this material would have no bearing on any potential substantial similarity between the two programs. Thus, its filtration would be wasteful and unnecessarily time consuming. Furthermore, by focusing the analysis on the

infringing rather than on the infringed material, a court may mistakenly place too little emphasis on a quantitatively small misappropriation which is, in reality, a qualitatively vital aspect of the plaintiff's protectable expression.

The fact that the district court's analysis proceeded in the reverse order, however, had no material impact on the outcome of this case. Since Judge Pratt determined that OSCAR effectively contained no protectable expression whatsoever, the most serious charge that can be leveled against him is that he was overly thorough in his examination.

[12] The district court took the first step in the analysis set forth in this opinion when it separated the program by levels of abstraction. The district court stated:

> As applied to computer software programs, this abstractions test would progress in order of "increasing generality" from object code, to source code, to parameter lists, to services required, to general outline. In discussing the particular similarities, therefore, we shall focus on these levels.

Computer Assocs., 775 F.Supp. at 560. While the facts of a different case might require that a district court draw a more particularized blueprint of a program's overall structure, this description is a workable one for the case at hand.

Moving to the district court's evaluation of OSCAR 3.5's structural components, we agree with Judge Pratt's systematic exclusion of non-protectable expression. With respect to code, the district court observed that after the rewrite of OSCAR 3.4 to OSCAR 3.5, "there remained virtually no lines of code that were identical to ADAPTER." *Id.* at 561. Accordingly, the court found that the code "present[ed] no similarity at all." *Id.* at 562.

[13] Next, Judge Pratt addressed the issue of similarity between the two programs' parameter lists and macros. He concluded that, viewing the conflicting evidence most favorably to CA, it demonstrated that "only a few of the lists and macros were similar to protected elements in ADAPTER;

the others were either in the public domain or dictated by the functional demands of the program." *Id.* As discussed above, functional elements and elements taken from the public domain do not qualify for copyright protection. With respect to the few remaining parameter lists and macros, the district court could reasonably conclude that they did not warrant a finding of infringement given their relative contribution to the overall program. *See Warner Bros., Inc. v. American Broadcasting Cos., Inc.*, 720 F.2d 231, 242 (2d Cir.1983) (discussing *de minimis*, exception which allows for literal copying of a small and usually insignificant portion of the plaintiff's work); 3 Nimmer § 13.03[F][5], at 13-74. In any event, the district court reasonably found that, for lack of persuasive evidence, CA failed to meet its burden of proof on whether the macros and parameter lists at issue were substantially similar. *See Computer Assocs.*, 775 F.Supp. at 562.

The district court also found that the overlap exhibited between the list of services required for both ADAPTER and OSCAR 3.5 was "determined by the demands of the operating system and of the applications program to which it [was] to be linked through ADAPTER or OSCAR . . . ." *Id.* In other words, this aspect of the program's structure was dictated by the nature of other programs with which it was designed to interact and, thus, is not protected by copyright.

Finally, in his infringement analysis, Judge Pratt accorded no weight to the similarities between the two programs' organizational charts, "because [the charts were] so simple and obvious to anyone exposed to the operation of the program[s]." *Id.* CA argues that the district court's action in this regard "is not consistent with copyright law"— that "obvious" expression is protected, and that the district court erroneously failed to realize this. However, to say that elements of a work are "obvious," in the manner in which the district court used the word, is to say that they "follow naturally from the work's theme rather than from the author's creativity." 3 Nimmer § 13.03[F][3], at 13-65. This is but one

formulation of the *scenes a faire* doctrine, which we have already endorsed as a means of weeding out unprotectable expression.

CA argues, at some length, that many of the district court's factual conclusions regarding the creative nature of its program's components are simply wrong. Of course, we are limited to our review of factual findings to setting aside only those that we determine are clearly erroneous. *See* Fed.R.Civ.P.52. Upon a thorough review of the voluminous record in this case, which is comprised of conflicting testimony and other highly technical evidence, we discern no error on the part of Judge Pratt, let alone clear error.

Since we accept Judge Pratt's factual conclusions and the results of his legal analysis, we affirm his denial of CA's copyright infringement claim based upon OSCAR 3.5. We emphasize that, like all copyright infringement cases, those that involve computer programs are highly fact specific. The amount of protection due structural elements, in any given case, will vary according to the protectable expression found to exist within the program at issue.

II. TRADE SECRET PREEMPTION

In its complaint, CA alleged that Altai misappropriated the trade secrets contained in the ADAPTER program. Prior to trial, while the proceedings were still before Judge Mishler, Altai moved to dismiss and for summary judgment on CA's trade secret misappropriation claim. Altai argued that section 301 of the Copyright Act preempted CA's state law cause of action. Judge Mishler denied Altai's motion, reasoning that " '[t]he elements of the tort of appropriation of trade secrets through the breach of contract or confidence by an employee are not the same as the elements of a claim of copyright infringement. ' " *Computer Assocs.*, 775 F.Supp. at 563.

The parties addressed the preemption issue again, both in pre- and post-trial briefs. Judge Pratt then reconsidered and reversed Judge Mishler's earlier ruling. The district court concluded that CA's trade secret claims were preempted because "CA—which is the master of its own case—has

pleaded and proven facts which establish that one act constituted both copyright infringement *and* misappropriation of trade secrets [namely, the] copying of ADAPTER into OSCAR 3.4 . . . ." *Id.* at 565.

In our original opinion, *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, Nos. 91-7893, 91-7935, slip op. 4715, 4762-69, 1992 WL 139364 (2d Cir. June 22, 1992), we affirmed Judge Pratt's decision. CA petitioned for rehearing on this issue. In its petition for rehearing, CA brought to our attention portions of the record below that were not included in the appendix on appeal. CA argued that these documents, along with Judge Mishler's disposition of Altai's motion to dismiss and for summary judgment, established that CA advanced non-preempted trade secret misappropriation claims before both Judge Mishler and Judge Pratt. CA further contended that Judge Pratt failed to consider its theory that Altai was liable for wrongful acquisition of CA's trade secrets through Arney. Upon reconsideration, we have granted the petition for rehearing, withdrawn our initial opinion, and conclude in this amended opinion that the district court's preemption ruling on CA's trade secret claims should be vacated. We accordingly vacate the judgment of the district court on this point and remand CA's trade secret claims for a determination on the merits.

A. *General Law of Copyright Preemption Regarding Trade Secrets and Computer Programs*

Congress carefully designed the statutory framework of federal copyright preemption. In order to insure that the enforcement of these rights remains solely within the federal domain, section 301(a) of the Copyright Act expressly preempts

> all legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106 in works of authorship that are fixed in a tangible medium of expression and come within the subject matter of copyright as specified by sections 102 and 103. . . .

17 U.S.C. § 301(a). This sweeping displacement of state law is, however, limited by section 301(b), which provides, in relevant part, that

> [n]othing in this title annuls or limits any rights or remedies under the common law or statutes of any State with respect to . . . activities violating legal or equitable rights that are not equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106. . . .

17 U.S.C. § 301(b)(3). Section 106, in turn, affords a copyright owner the exclusive right to: (1) reproduce the copyrighted work; (2) prepare derivative works; (3) distribute copies of the work by sale or otherwise; and, with respect to certain artistic works, (4) perform the work publicly; and (5) display the work publicly. *See* 17 U.S.C. § 106(1)-(5).

Section 301 thus preempts only those state law rights that "may be abridged by an act which, in and of itself, would infringe one of the exclusive rights" provided by federal copyright law. *See Harper & Row, Publishers, Inc. v. Nation Enters.*, 723 F.2d 195, 200 (2d Cir.1983), *rev'd on other grounds*, 471 U.S. 539, 105 S.Ct. 2218, 85 L.Ed.2d 588 (1985). But if an "extra element" is "required instead of or in addition to the acts of reproduction, performance, distribution or display, in order to constitute a state-created cause of action, then the right does not lie 'within the general scope of copyright,' and there is no preemption." 1 Nimmer § 1.01[B], at 1-14-15; *see also Harper & Row, Publishers, Inc.*, 723 F.2d at 200 (where state law right "is predicated upon an act incorporating elements beyond mere reproduction or the like, the [federal and state] rights are not equivalent" and there is no preemption).

[14] A state law claim is not preempted if the "extra element" changes the "nature of the action so that it is *qualitatively* different from a copyright infringement claim." *Mayer v. Josiah Wedgwood & Sons, Ltd.*, 601 F.Supp. 1523, 1535 (S.D.N.Y.1985); *see Harper & Row, Publishers, Inc.*, 723 F.2d at 201. To determine whether a claim meets this

standard, we must determine "what plaintiff seeks to protect, the theories in which the matter is thought to be protected and the rights sought to be enforced." 1 Roger M. Milgrim, *Milgrim on Trade Secrets* § 2.06A[3], at 2-150 (1992) (hereinafter "Milgrim"). An action will not be saved from preemption by elements such as awareness or intent, which alter "the action's scope but not its nature. . . ." *Mayer*, 601 F.Supp. at 1535.

Following this "extra element" test, we have held that unfair competition and misappropriation claims grounded solely in the copying of a plaintiff's protected expression are preempted by section 301. *See, e.g., Walker v. Time Life Films, Inc.*, 784 F.2d 44, 53 (2d Cir.), *cert. denied*, 476 U.S.1159, 106 S.Ct. 2278, 90 L.Ed.2d 721 (1986); *Warner Bros., Inc. v. American Broadcasting Cos.*, 720 F.2d 231, 247 (2d Cir.1983); *Durham Indus., Inc. v. Tomy Corp.*, 630 F.2d 905, 919 & n. 15 (2d Cir.1980). We also have held to be preempted a tortious interference with contract claim grounded in the impairment of a plaintiff's right under the Copyright Act to publish derivative works. *See Harper & Row, Publishers, Inc.*, 723 F.2d at 201.

[15] However, many state law rights that can arise in connection with instances of copyright infringement satisfy the extra element test, and thus are not preempted by section 301. These include unfair competition claims based upon breaches of confidential relationships, breaches of fiduciary duties and trade secrets. *Balboa Ins. Co. v. Trans Global Equities*, 218 Cal. App.3d 1327, 1339-53, 267 Cal.Rptr. 787,793-803 (Ct.App. 3rd Dist.), *cert. denied*, — U.S.,— 111 S.Ct. 347, 112 L.Ed.2d 311 (1990).

[16] Trade secret protection, the branch of unfair competition law at issue in this case, remains a "uniquely valuable" weapon in the defensive arsenal of computer programmers. See I Milgrim § 2.06A[5][c], at 2-172.4. Precisely because trade secret doctrine protects the discovery of ideas, processes, and systems which are explicitly precluded from coverage under copyright law, courts and commentators alike

consider it a necessary and integral part of the intellectual property protection extended to computer programs. *See id.*; *see also Integrated Cash Management Servs., Inc. v. Digital Transactions, Inc.*, 920 F.2d 171, 173 (2d Cir.1990) (while plaintiff withdrew copyright infringement claim for misappropriation of computer program, relief for theft of trade secret sustained); *Healthcare Affiliated Servs., Inc. v. Lippany*, 701 F.Supp. 1142, 1152-55 (W.D.Pa.1988) (finding likelihood of success on trade secret claim, but not copyright claim); *Q-Co Indus., Inc.*, 625 F.Supp. at 616-18 (finding likelihood of success on trade secret claim, but no merit to copyright claim); *Kretschmer*, at 847-49.

The legislative history of section 301 states that "[t]he evolving common law rights of . . . trade secrets . . . would remain unaffected as long as the causes of action contain elements, such as . . . a breach of trust or confidentiality, that are different in kind from copyright infringement." *House Report*, at 5748. Congress did not consider the term "misappropriation" to be "necessarily synonymous with copyright infringement," or to serve as the talisman of preemption. *Id.*

Trade secret claims often are grounded upon a defendant's breach of a duty of trust or confidence to the plaintiff through improper disclosure of confidential material. *See, e.g., Mercer v. C.A. Roberts Co.*, 570 F.2d 1232, 1238 (5th Cir.1978); *Brignoli v. Balch Hardy and Scheinman, Inc.*, 645 F.Supp. 1201, 1205 (S.D.N.Y.1986). The defendant's breach of duty is the gravamen of such trade secret claims, and supplies the "extra element" that qualitatively distinguishes such trade secret causes of action from claims for copyright infringement that are based solely upon copying. *See, e.g., Warrington Assoc., Inc. v. Real-Time Eng'g Sys., Inc.*, 522 F.Supp. 367, 369 (N.D.Ill.1981); *Brignoli*, 645 F.Supp. at 1205; *see also generally Balboa Ins. Co.*, 218 Cal.App.3d at 1346-50, 267 Cal.Rptr. at 798-802 (reviewing cases).

B. *Preemption in this Case*

The district court stated that:

> Were CA's [trade secret] allegations premised on a theory of illegal *acquisition* of a trade secret, a charge that might have been alleged against Arney, who is not a defendant in this case, the preemption analysis might be different, for there seems to be no corresponding right guaranteed to copyright owners by § 106 of the copyright act.

Computer Assocs., 775 F.Supp. at 565. However, the court concluded that CA's trade secret claims were not grounded in a theory that Altai violated a duty of confidentiality to CA. Rather, Judge Pratt stated that CA proceeded against Altai solely "on a theory that the misappropriation took place by Altai's *use* of ADAPTER—the same theory as the copyright infringement count." *Id.* The district court reasoned that "the right to be free from trade secret misappropriation through 'use', and the right to exclusive reproduction and distribution of a copyrighted work are not distinguishable." *Id.* Because he concluded that there was no qualitative difference between the elements of CA's state law trade secret claims and a claim for federal copyright infringement, Judge Pratt ruled that CA's trade secret claims were preempted by section 301.

We agree with CA that the district court failed to address fully the factual and theoretical bases of CA's trade secret claims. The district court relied upon the fact that Arney—not Altai—allegedly breached a duty to CA of confidentiality by stealing secrets from CA and incorporating those secrets into OSCAR 3.4. However, under a wrongful acquisition theory based on *Restatement (First) of Torts* § 757 (1939), Williams and Altai may be liable for violating CA's right of confidentiality. Section 757 states in relevant part:

> One who discloses or uses another's trade secret, without a privilege to do so, is liable to another if . . . . (c) he learned the secret from a third person with notice of the fact that it was a secret and that the third person discovered it by improper means or that the third person's disclosure of it was otherwise a breach of his duty to the other. . . .

[17] Actual notice is not required for such a third party acquisition claim; constructive notice is sufficient. A defendant is on constructive notice when, "from the information which he has, a reasonable man would infer [a breach of confidence], or if, under the circumstances, a reasonable man would be put on inquiry and an inquiry pursued with reasonable intelligence and diligence would disclose the [breach]." *Id.* comment 1; *Metallurgical Indus., Inc. v. Fourtek, Inc*, 790 F.2d 1195, 1204 (5th Cir.1986); *Vantage Point, Inc. v. Parker Bros., Inc.*, 529 F.Supp. 1204, 1210 n. 2 (E.D.N.Y.1981), *affd.*, 697 F.2d 301 (2d Cir. 1982); *see also Rohm and Haas Co. v. Adco Chem. Co.*, 689 F.2d 424, 431 (3rd Cir.1982) ("Defendants never asked where the 'Harvey process' had come from. Defendants therefore were charged 'with whatever knowledge such inquiry would have led to.' ") (citation omitted); *Colgate-Palmolive Co. v. Carter Prods., Inc.*, 230 F.2d 855, 864 (4th Cir.) (per curiam) (defendant " 'must have known by the exercise of fair business principles' " that its employee's work was covered by an agreement not to disclose) (citation omitted), *cert. denied*, 352 U.S. 843, 77 S.Ct. 43, 1 L.Ed.2d 59 (1956); 1 Milgrim § 5.04[2][c].

We agree with the district court that New Jersey's governing governmental interest choice of law analysis directs the application of Texas law to CA's trade secret misappropriation claim. *See Computer Assocs.*, 775 F.Supp. at 566. Texas law recognizes trade secret misappropriation claims grounded in the reasoning of *Restatement* section 757(c), *see, e.g., Fourtek*, 790 F.2d at 1204, and the facts alleged by CA may well support such a claim.

[18] It is undisputed that, when Arney stole the ADAPTER code and incorporated it into his design of OSCAR 3.4, he breached his confidentiality agreement with CA. The district court noted that while such action might constitute a valid claim against *Arney*, CA is the named defendant in this lawsuit. Additionally, the district court found, as a matter of fact, that "[n]o one at Altai, other than Arney, knew that Arney had the ADAPTER code. . . ."

Computer Assocs., 775 F.Supp. at 554. However, the district court did not consider fully Altai's potential liability for improper trade secret acquisition. It did not consider the question of Altai's trade secret liability in connection with OSCAR 3.4 under a constructive notice theory, or Altai's potential liability under an actual notice theory in connection with OSCAR 3.5.

The district court found that, prior to CA's bringing suit, Altai was not on actual notice of Arney's theft of trade secrets, and incorporation of those secrets into OSCAR 3.4. However, by virtue of Williams' close relationship with Arney, Williams' general familiarity with CA's programs (having once been employed by CA himself), and the fact that Arney used the ADAPTER program in an office at Altai adjacent to Williams during a period in which he had frequent contact with Williams regarding the OSCAR/VSE project, Williams (and through him Altai) may well have been on constructive notice of Arney's breach of his duty of confidentiality toward CA. The district court did not address whether Altai was on constructive notice, thereby placing it under a duty of inquiry; rather the court's finding that only Arney affirmatively knew of the theft of CA's trade secrets and incorporation of those secrets into OSCAR 3.4 simply disposed of the issue of actual notice in connection with the creation of OSCAR 3.4. CA's claim of liability based on constructive notice, never considered in the district court's opinion, must be determined on remand.

[19] With respect to actual notice, it is undisputed that CA's first complaint, filed in August 1988, informed Altai of Arney's trade secret violations in connection with the creation of OSCAR 3.4. The first complaint alleged that Arney assisted in the development of ADAPTER, thereby obtaining knowledge of CA's related trade secrets. It also alleged that Altai misappropriated CA's trade secrets by incorporating them into ZEKE.

In response to CA's complaint, Altai rewrote OSCAR 3.4, creating OSCAR 3.5. While we agree with the district

court that OSCAR 3.5 did not contain any expression protected by copyright, it may nevertheless still have embodied many of CA's trade secrets that Arney brought with him to Altai. Since Altai's rewrite was conducted with full knowledge of Arney's prior misappropriation, in breach of his duty of confidentiality, it follows that OSCAR 3.5 was created with actual knowledge of trade secret violations. Thus, with regard to OSCAR 3.5, CA had a viable trade secret claim against Altai that must be considered by the district court on remand. This claim is grounded in Altai's alleged use of CA's trade secrets in the creation of OSCAR 3.5, while on actual notice of Arney's theft of trade secrets and incorporation of those secrets into OSCAR 3.4. The district court correctly stated that a state law claim based *solely* upon Altai's "use", by copying, of ADAPTER's non-literal elements could not satisfy the governing "extra element" test, and would be preempted by section 301. However, where the use of copyrighted expression is simultaneously the violation of a duty of confidentiality established by state law, that extra element renders the state right qualitatively distinct from the federal right, thereby foreclosing preemption under section 301.

[20] We are also convinced that CA adequately pled a wrongful acquisition claim before Judge Mishler and Judge Pratt. In ruling that CA failed to properly plead a non-preempted claim, Judge Pratt relied heavily upon two allegations in CA's amended complaint. *Id.* at 563-64. They read as follows:

> ¶57. By reason of the facts stated in paragraph 39 and by copying from CA-SCHEDULER into ZEKE, ZACK and ZEBB the various elements stated in paragraphs 39-51, 54 and 55, defendant Altai has infringed [CA's] copyright in CA-SCHEDULER.
>
> * * * * * *
>
> ¶73. Defendant's incorporation into its ZEKE, ZACK and ZEBB programs of the various elements

> contained in the ADAPTER component of [CA's] CA-SCHEDULER program as set out in paragraphs 39-51, 54 and 55 constitutes the willful misappropriation of the proprietary property and trade secrets of plaintiff [CA].

From these pleadings, Judge Pratt concluded that the very same act, i.e., Altai's copying of various elements of CA's program, was the basis for both CA's copyright infringement and trade secret claims. *See id.* at 564. We agree with Judge Pratt that CA's allegations are somewhat inartfully stated. However, when taken together, the terms "incorporation" and "misappropriation" in paragraph 73 above suggest to us an act of a qualitatively different nature than the infringement pled in paragraph 57. *House Report*, at 5748 (" '[m]isappropriation' is not necessarily synonymous with copyright infringement").

In support of our reading, we note that paragraphs 65-75 of CA's amended complaint alleged facts that reasonably comprise the elements of a wrongful acquisition of trade secrets claim. CA averred that, while he was employed at CA, Arney learned CA's trade secrets regarding the ADAPTER program. CA further alleged that, after Arney went to work for Altai, Altai misappropriated those trade secrets by incorporating CA's ADAPTER program into its own product. Finally, CA claimed that the trade secret misappropriation was carried out "in a willful, wanton and reckless manner in disregard of [CA's] rights." In other words, Altai could have reasonably inferred from CA's allegations that CA's claim, in part, rested on Williams' "wanton and reckless" behavior in the face of constructive notice.

In addition, while responding to Altai's preemption argument in its motion to dismiss and for summary judgment, CA specifically argued in its brief to Judge Mishler that "it can easily be inferred that Mr. Arney was hired by Altai to misappropriate [CA's] confidential source code for Altai's benefit." At oral argument, CA further contended that:

> The circumstances of Mr. Arney's hiring suggested that Mr. Williams wanted more than Mr. Arney's ability and

> in fact got exactly what he wanted. And that is Computer Associates' confidential Adapter technology.
>
> * * * * * *
>
> [Arney testified that he] surreptitiously took that code home from Computer Associates after giving notice he was going to go to work for Altai, and after being hired by Mr. Williams to come to Altai and reconstruct Zeke, to work on the MVS operating system.

In the aftermath of Judge Mishler's ruling in its favor on Altai's motion to dismiss and for summary judgment, CA reasonably believed that it had sufficiently alleged a non-preempted claim. And, in light of CA's arguments and Judge Mishler's ruling, Altai clearly was on notice that the amended complaint placed non-preempted trade secret claims in play. *See* 5 Charles A. Wright & Arthur R. Miller, *Federal Practice and Procedure* § 1215, at 136-38 (2d ed. 1990) (federal pleading standards require plaintiff to provide defendant with fair notice of claim and grounds it rests on).

Accordingly, we vacate the judgment of the district court and remand for reconsideration of those aspects of CA's trade secret claims related to Altai's alleged constructive notice of Arney's theft of CA's trade secrets and incorporation of those secrets into OSCAR 3.4. We note, however, that CA may be unable to recover damages for its trade secrets which are embodied in OSCAR 3.4 since Altai has conceded copyright liability and damages for its incorporation of ADAPTER into OSCAR 3.4. CA may not obtain a double recovery where the damages for copyright infringement and trade secret misappropriation are coextensive.

However, additional trade secret damages may well flow from CA's creation of OSCAR 3.5. Judge Pratt correctly acknowledged that "[i]f CA's claim of misappropriation of trade secrets did not fail on preemption grounds, it would be necessary to examine in some detail the conflicting claims and evidence relating to the process by which Altai rewrote OSCAR and ultimately produced version 3.5." *Computer Assocs.*, 775 F.Supp. at 554-55; *see also* 1 Milgrim §

5.04[2][d], at 5-148 ("after notice, the [innocent] second user should cease the use, and if he does not he can be enjoined and held liable for damages arising from such use subsequent to notice"). Since we hold that CA's trade secret claims are not preempted, and that, in writing OSCAR 3.5, Altai had actual notice of Arney's earlier trade secret violations, we vacate and remand for such further inquiry anticipated by the district court. If the district court finds that CA was injured by Altai's unlawful use of CA's trade secrets in creating OSCAR 3.5, CA is entitled to an award of damages for trade secret misappropriation, as well as consideration by the district court of CA's request for injunctive relief on its trade secret claim.

CONCLUSION

In adopting the above three step analysis for substantial similarity between the non-literal elements of computer programs, we seek to insure two things: (1) that programmers may receive appropriate copyright protection for innovative utilitarian works containing expression; and (2) that non-protectable technical expression remains in the public domain for others to use freely as building blocks in their own work. At first blush, it may seem counterintuitive that someone who has benefited to some degree from illicitly obtained material can emerge from an infringement suit relatively unscathed. However, so long as the appropriated material consists of non-protectable expression, "[t]his result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art." *Feist*, — U.S. at —, 111 S.Ct. at 1290.

Furthermore, we underscore that so long as trade secret law is employed in a manner that does not encroach upon the exclusive domain of the Copyright Act, it is an appropriate means by which to secure compensation for software espionage.

Accordingly, we affirm the judgment of the district court in part; vacate in part; and remand for further proceedings.

The parties shall bear their own costs of appeal, including the petition for rehearing.

ALTIMARI, Circuit Judge, concurring in part and dissenting in part:

Because I believe that our original opinion, *see Computer Assoc. Int'l v. Altai*, Nos. 91-7893(L), 1992 WL 139364 (2d Cir. June 22, 1992), is a reasoned analysis of the issues presented, I adhere to the original determination and therefore concur in Part 1 and respectfully dissent from Part 2 of the amended opinion.

COMPUTER ASSOCIATES INTERNATIONAL, INC., PLAINTIFF,

v.

ALTAI, INC., Defendant.

No. CV 89-0811.

United States District Court, E.D. New York.

Aug. 9, 1991.

Copyright owner brought action for infringement of copyright protecting operating system compatibility component of computer program. The District Court, George C. Pratt, Circuit Judge, sitting by designation, held that: (1) certificate stating that copyright was claimed in text of derivative computer program based on unregistered program was sufficient compliance with registration requirement; (2) rewritten compatibility component in computer program was not substantially similar to copyrighted component and, therefore, did not infringe it; and (3) Copyright Act preempted claim for misappropriation of trade secrets.

So ordered.

1. Copyrights and Intellectual Property

Certificate stating that copyright was claimed in text of derivative computer program based on unregistered program was sufficient compliance with registration requirement to permit owner to maintain action for infringement of unregistered operating system compatibility component of program; code for compatibility component had not been placed in public domain, and owner was author of compatibility component. 17 U.S.C.A. §§ 102, 103(b), 408(a), 411(a), 412.

2. Copyrights and Intellectual Property

Copyright protection for registered program that was derived from unregistered program covered unregistered operating system compatibility component of program; compatibility component's code had not been placed in public domain, and owner was author of compatibility component. 17 U.S.C.A. §§ 102, 103(b), 408(a), 411(a), 412.

3. Copyrights and Intellectual Property

When owner registered copyright in computer program as derivative work, it was not required simultaneously to register separately every component part such as operating system compatibility component. 17 U.S.C.A. §§ 102, 103(b), 408(a), 411(a), 412.

4. Copyright and Intellectual Property

Copyright infringement action need not be dismissed simply because registration occurs after filing of complaint; formalistic dismissal, followed by re-registration and commencement of new action, is unnecessary and would be wasteful. 17 U.S.C.A. § 411(a).

5. Copyrights and Intellectual Property

No substantive rights were affected by treating supplemental copyright registration, as relating back to date of original registration, where three-year statute of limitations running from knowledge of infringement had not expired at time that motion to amend was made. 17 U.S.C.A. § 411(a).

6. Copyrights and Intellectual Property

"Access" is opportunity to view or copy plaintiff's copyrighted work.

See publication Words and Phrases for other judicial constructions and definitions.

7. Copyrights and Intellectual Property

"Substantial similarity" inquiry in copyright infringement case requires court to decide whether similarity shared by works are something more than mere generalized ideas or themes.

See publication Words and Phrases for other judicial constructions and definitions.

8. Copyrights and Intellectual Property

In determining similarities between operating system compatibility components of copyrighted computer program and allegedly infringing program, court could turn attention away from programs as "behavior" and focus more closely on programs as text, i.e., source code and object code. 17 U.S.C.A. §§ 102(a), 102(b).

9. Copyrights and Intellectual Property

As applied to computer software programs, abstractions test of substantial similarity between copyrighted program and allegedly infringing program progresses in order of increasing generality from object code, to source code, to parameter list, to services required, and to general outline.

10. Copyrights and Intellectual Property

Computer program's operating system compatibility component that was rewrite of infringing program was not substantially similar to and, therefore, did not infringe copyrighted component; allegedly infringing component contained virtually no lines of code that were identical to copyrighted component, evidence indicated that many parameter lists and macros were dictated by functionality of program, great deal of overlap between list of services was required by demands of functionality, and high-level structure was not important.

11. Courts

Generally, when court has ruled on issue, that decision should be adhered to by that court in subsequent stages of the same case.

12. Courts

Disregard of earlier ruling should not be allowed to prejudice party seeking to benefit under law-of-the-case doctrine.

13. Courts

"Prejudice" as used in principle that disregard of earlier ruling should not be allowed to prejudice party seeking to benefit under law-of-the-case doctrine does not mean harm; it refers to lack of sufficiency of notice or lack of sufficient opportunity to prepare armed with knowledge that prior ruling is not deemed controlling.

See publication Words and Phrase for other judicial constructions and definitions.

14. Courts

No prejudice could result from reconsidering law of the case that Copyright Act did not preempt claim for misappropriation of trade secrets; both parties briefed preemption issue in briefs before and after trial and treated issue as one which was in play. 17 U.S.C.A. § 301(a).

15. Courts

District court's ruling that Copyright Act did not on its face preempt claim for misappropriation of trade secrets would be clearly erroneous and, therefore, would not be law of the case barring consideration of preemption issue. 17 U.S.C.A. § 301(a).

16. States

Torts

Trade secret rights allegedly violated by copying component of computer program were equivalent to copyright owner's exclusive rights of reproduction and distribution and, therefore, were preempted by Copyright Act. 17 U.S.C.A §§ 101, 106, 106(1-5), 301(a).

17. Copyrights and Intellectual Property

States

Right "equivalent to" copyright and preempted by Copyright Act is one which is infringed by act of reproduction, performance, distribution, or display. 17 U.S.C.A. §§ 101, 106, 106(1-5), 301(a).

See publication Words and Phrases for other judicial constructions and definitions.

18. Torts

Computer program can be copyrighted and still maintain its trade secret status.

19. Limitation of Actions

Texas' two-year statute of limitations on trade secret claim would not begin to run until discovery.

20. Copyrights and Intellectual Property

Copyright owner's actual damages from copying of operating system compatibility component of computer program could not be calculated on assumption that owner would have sold its percentage market share of infringer's sales; owner sold much more expensive product, and nothing indicated that infringer's customers would have gone to owner in anything near proportion that owner was able to select from overall market. 17 U.S.C.A. §§ 504, 504(b).

21. Copyrights and Intellectual Property

Copyright owner's actual damages from copying of operating system compatibility component of computer program could not be calculated on assumption that infringer would have marketed no competing product but for the infringement; before infringing component was developed, infringer was producing program in competition with copyrighted component, and other versions of programs could readily have been developed. 17 U.S.C.A. §§ 504, 504(b).

22. Copyrights and Intellectual Property

Profits attributable to infringement by copying operating system compatibility component of computer program could not be calculated on basis of infringer's complete revenues on sales of products; many customers were unaware of compatibility components, and it could not be assumed that no sales would have been made without the compatibility components. 17 U.S.C.A. §§ 504, 504(b).

23. Copyrights and Intellectual Properly

Allocating fair proportion of profit on particular sale to presence of infringing operating system compatibility component of computer program would be appropriate in calculating profits attributable to infringement; many customers were not aware of compatibility component, and its presence was not factor in decision of most customers. 17 U.S.C.A. §§ 504, 504(b).

24. Copyrights and Intellectual Property

Proper measure of value of infringer's enhanced good will would have been to compare preinfringement value with postinfringement value and to allow the difference. 17 U.S.C.A. §§ 504, 504(b).

25. Copyrights and Intellectual Property

Lack of evidence that copyright owner lost any sales as result of infringement of operating system compatibility

component of computer program did not preclude recovery of actual damages; fact that some damage occurred had to be recognized. 17 U.S.C.A. §§ 504, 504(b).

26. Copyrights and Intellectual Property

Profits attributable to copyright infringement of operating system compatibility component of computer program were not represented by money saved through developing compatibility component by infringement, rather than by independent research, and were not extra profits earned because infringer could deliver program to market place three months earlier. 17 U.S.C.A. §§ 504, 504(b).

27. Copyrights and Intellectual Property

Actual damages as result of approximately five years of infringement of copyright protecting operating system compatibility component of computer program could be calculated by assigning one third of value of infringing compatibility component to the infringed portion, evaluating significance of infringing component in infringer's programs as one third of total value, deducting $500,000 caused by owner's higher price levels and infringer's competition without infringing copyright, deducting $500,000 as reasonable additional cost allowance, and multiplying net revenues of $2,500,000 by one-ninth. 17 U.S.C.A. §§ 504, 504(b).

28. Copyrights and Intellectual Property

Significance or value of copied material was not necessarily measured by counting lines of code to compute actual damages for infringing copyright that protected operating system compatibility component of computer program; qualitative value should also be taken into account. 17 U.S.C.A. §§ 504, 504(b).

29. Copyrights and Intellectual Property

One third of estimated profits from sales of computer programs over four-year period were attributable to infringement of copyright protecting operating system compatibility component of computer program; approximately 30% of lines of code in infringing component were copied directly from copyrighted component, and one third of value of infringing component should be attributed to infringed portion. 17 U.S.C.A. §§ 504, 504(b).

30. Copyrights and Intellectual Property

Copyright owner was not entitled to attorney fees for infringement that began before registration of copyright. 17 U.S.C.A. §§ 412, 505.

31. Copyrights and Intellectual Property

Infringer that prevailed on claim that rewritten computer program did not infringe copyright was not entitled to attorney fees. 17 U.S.C.A. § 505.

32. Copyrights and Intellectual Property

Costs for court-appointed expert could be divided equally between copyright owner and infringer; infringement produced lawsuit and necessitated expert's testimony, but infringer prevailed on principal issue whether rewritten computer program infringed copyright. Fed.Rules Evid.Rule 706, 28 U.S.C.A.

Weil, Gotshal & Manges by Stephen D. Kahn, New York City, for plaintiff.

Anderson Kill Olick & Oshinsky by Susan G. Braden, Washington, D.C., Susman & Godfrey by Steven D. Susman, Dallas, Tex., for defendant.

TABLE OF CONTENTS

I. INTRODUCTION 549

II. FACTS AND BACKGROUND 549

A. Parties 549

B. Computers, Computer Programs, and Operating Systems 549

C. Operating System Compatability Components (Interfaces) 551

D. The Computer Programs 552

1. CA-SCHEDULER 552

2. ADAPTER 552

3. ZEKE 552

4. OSCAR 552

E. Dramatis Personae 553

1. James P. Williams 553

2. Claude F. Arney, III 553

F. Development of OSCAR 3.4 553

G. Rewrite of OSCAR 3.4 into OSCAR 3.5 554

H. Evaluation of Altai's rewrite of OSCAR 554

III. DISCUSSION 555

A. Copyright Infringement 555

1. Ownership of a Valid Copyright 555

2. Copying of the Copyrighted Work 557

a. Access 558

b. Substantial Similarity 558

i. Similarities between ADAPTER and OSCAR 3.4 560

ii. Similarities between ADAPTER and OSCAR 3.5 561

B. Misappropriation of Trade Secrets 562

1. Preemption 563

a. Law of the Case? 563

b. Preemption Analysis As Applied to the Facts 563

2. Choice of Law 566

a. Which State's Principles? 566

b. Which State's Substantive Law? 566

c. Is the Texas Statute of Limitations a Bar? 566

C. Damages 567

1. CA's View of Damages 567

2. Altai's View of Damages 568

3. Defects in CA's View 568

a. CA's Actual Damages 568

b. Altai's Profits from OSCAR 3.4 570

c. Altai's Enhanced Good Will 570

4. Defects in Altai's View 570

a. CA's Actual Damages 570

b. Altai's Profits from OSCAR 3.4 571

c. Altai's Enhanced Good will 571

5. Evaluation and Conclusion as to Damages . 571

6. Interest 572

D. Housekeeping Matters 572

1. Punitive Damages 572

2. Attorney's Fees 572
a. OSCAR 3.4 572
b. OSCAR 3.5 573
3. Fees of Dr. Davis 573
4. Costs 573
5. The French Motion 573
6. Exhibits 573
IV. CONCLUSION 573

MEMORANDUM AND ORDER

GEORGE C. PRATT, Circuit Judge (sitting by designation):

I. INTRODUCTION

Plaintiff Computer Associates International, Inc. ("CA") brought this action in August 1988 alleging that defendant Altai, Inc. ("Altai") had copied substantial portions of CA's SCHEDULER program into Altai's own computer software programs known as ZEKE, ZACK, and ZEBB. CA claims that Altai infringed CA's copyright in CA-SCHEDULER; in addition, CA claims that Altai misappropriated CA's trade secrets by incorporating elements of the CA-SCHEDULER program into ZEKE, ZACK, and ZEBB. The focal point of CA's claims of both copyright infringement and trade secret misappropriation is a discrete portion of Altai's programs called OSCAR, which CA contends was copied from a portion of its CA-SCHEDULER program known as ADAPTER.

After most of the pretrial proceedings had been completed, this case was assigned to the undersigned for trial without a jury. Because of the extensive technical evidence and expert testimony anticipated from both sides, the court appointed Dr. Randall Davis of the Massachusetts Institute of Technology as its own expert, pursuant to Fed. R. Evid. 706 .

Trial commenced on March 28, 1990, and concluded on April 6, 1990, following which counsel submitted additional memoranda for the court's consideration.

This memorandum and order disposing of this action includes the court's findings of fact and conclusions of law as required by Fed.R.Civ.P. 52(a).

II. FACTS AND BACKGROUND

A. *The Parties*

Plaintiff CA is incorporated under the laws of the State of Delaware, and has its principal place of business at 711

Stewart Avenue, Garden City, New York 11530. Defendant Altai is incorporated under the laws of the State of Texas and has its principal place of business at 624 Six Flags Drive, Arlington, Texas 76011. Both CA and Altai design, develop, market, and support various computer software programs.

B. *Computers, Computer Programs, and Operating Systems*

To understand what ADAPTER and OSCAR do, it is necessary to focus upon how computers work and consider some basic computer terminology. Computers are machines which can do certain things based upon instructions. A computer is traditionally viewed as composed of three fundamental components: a CPU (central processing unit), some memory, and some means of getting input and displaying output. The CPU is where all the actual computing is done. Memory is used to hold the program that is being run, as well as to provide a place for the program to store the intermediate results of a calculation.

A computer program, as defined in 17 U.S.C. § 101, "is a set of statements or instructions to be used directly or indirectly in a computer to bring about a certain result." Computer programs can be classified as systems programs and applications programs. Systems programs are concerned with the operation or use of the computer. Applications programs perform a task or set of tasks for the computer user, such as payroll accounting, data base operation, or word processing.

Programs that run on the same computer and operating system can be divided into three types. The first, resident programs, reside in the computer's memory where they run continuously. CA-SCHEDULER and Altai's ZEKE are resident programs. A second type, batch programs, are scheduled, started, and run to completion of a particular job. The third group, server programs, are resident programs used by other programs to perform a service. ADAPTER and OSCAR are both classified as server programs.

One particular type of system software is called operating system software. Operating systems are the programs that manage the resources of the computer and allocate those resources to other programs that need them. For example, operating system software might perform among others, these functions:

—channeling information entered at a keyboard to the proper application program;

—sending information from an application program to a display screen;

—providing blocks of memory to an application program that requires them; and

—allocating processing time among several application programs running on the computer at the same time.

Operating system software interacts with whatever other programs are being used or "executed" by the computer, providing computer resources such as processors, memory, disk space, printers, tape drives, etc. for the other programs that need them through what are often referred to as "system calls". For this interaction to occur properly, the other programs must be compatible with the operating system software in use on the computer, *i.e.*, they must be able to exchange information precisely and accurately with the operating system to interact with those computer resources.

The computers involved in this case are IBM's System 370 family of computers. These are mainframe computers which come in varying sizes. IBM designed and developed three different operating systems for use with its System 370 computers: DOS/VSE for use with the small-to-medium-size computers; MVS for larger computers; and CMS for interactive computers.

DOS/VSE and MVS are especially popular operating systems with businesses that run mostly batch jobs (which are sequences of application programs requiring no active user input during job execution), although both systems can support interactive applications in which users continuously

interact with the computer. Businesses that run interactive applications or do a large amount of application development, which is also highly interactive, often choose the CMS operating system, which is the most efficient system for a highly interactive environment.

Although the mix of batch and interactive jobs is a major influence in a data center's choice of operating system, all data centers run a large number of batch jobs each day. Job scheduling programs are particularly useful in managing the summary of batch jobs.

Because an operating system manages the operation of a computer, a computer program must "fit", or "speak in the same language as", the operating system used by the computer on which the program is run. In general, a program written for one operating system, *e.g.*, DOS/VSE, will not, without modification, run under another operating system such as MVS.

It is commercially desirable for software development companies like CA and Altai to market the same system or application program in versions that can run in connection with different operating systems. That way, users can take advantage of the services which the system or application program provides and the methods for its use, regardless of what operating system they are currently using. Users can switch operating systems (for example, users may switch from VSE to MVS as their computer installations grow), or even use multiple operating systems, yet continue to use a program that appears to them to be functionally identical. Using application or system programs that can function on several different operating systems can save a data center time and money that would otherwise be spent acquiring new programs similar in functionality to the old ones, adapting the system to run them, and training users to operate them.

Various approaches to software development address this operating-system problem. One common technique is to develop different versions of the program that are identical in most respects, but have system calls written to function under

the different operating systems. Thus, for example, a software company might develop three versions of an application or system program, one each for DOS/VSE, MVS, and CMS. Each version might also be rewritten somewhat to take advantage of features offered in one operating system but not another. A deficiency inherent in this approach is that it requires a software company to develop and maintain many different versions of the same program. Changing the program or adding new features requires modifications to all versions. When problems are found and fixed in one version, the other versions must be examined to determine if the same problem must be fixed in each of them as well. Software developers must insure that any changes made to a program are sensitive to the particular operating system under which the programs runs.

Marketing multiple versions of each product also increases the work required for development and maintenance. Additional programming resources are needed to develop features and fix problems to all versions in parallel. In addition, the software development staffs must coordinate carefully to make the versions as similar to each other as possible from the users' point of view. This is a cumbersome way to develop and maintain products that run on multiple operating systems.

C. *Operating System Compatability Components (Interfaces)*

A more efficient approach to the problem of developing an application or system program that will function on different operating systems is to divide the program into two components:

—a first component that contains only the task-specific portions of the program, independent of all operating system issues, and

—second component that contains all the interconnections between the first component and the operating system.

In a program constructed in this way, whenever the first, task-specific, component needs to ask the operating system for some resource through a "system call", it calls the second component instead of calling the operating system directly.

The second component serves as an "interface" or "compatibility component" between the task-specific portion of the program and the operating system. It receives the request from the first component and translates it into the appropriate system call that will be recognized by whatever operating system is installed on the computer, *e.g.*, DOS/VSE, MVS, or CMS. Since the first, task-specific, component calls the adapter component rather than the operating system, the first component need not be customized to use any specific operating system. The second, interface, component insures that all the system calls are performed properly for the particular operating system in use.

Once a version of the interface component has been created for each operating system using this approach, the task-specific component of each program only has to be written once. This has two desirable effects.

First, to adapt a program to a new version of an existing operating system or an entirely new operating system, the developer need only modify the interface component; no changes need to be made to the task-specific component, which now has no operating-system-specific parts.

Second, revisions to the task-specific component of the program to correct problems or add features will not affect the program's ability to run under all operating systems, as long as the changes that request operating system services use the interface component. This method is an efficient and effective way to develop and maintain an application or system program that runs in many operating systems.

Since the interface component is invisible to the end user, the end user need not even be aware that operating system compatibility is an issue. Therefore, the end user can switch operating systems and still use a given application or system program without apparent differences. It may be

necessary to acquire and install a different version of the application program, but once the different version is installed, the end user will not notice the difference.

D. *The Computer Programs of This Case*

1. CA-SCHEDULER

CA-SCHEDULER is a job scheduling program for IBM mainframe computers. As one of a group of CA's data center automation products, CA-SCHEDULER's functions are to create a schedule that specifies when the computer should run various tasks, and to control the computer as it progresses through that schedule. CA began development of CA-SCHEDULER in mid-1981, and first installed it at a customer location in August 1982. This version of CA-SCHEDULER included ADAPTER, as did all subsequent versions of CA-SCHEDULER.

2. ADAPTER

Part of CA-SCHEDULER is an operating system compatibility component called ADAPTER, which connects CA-SCHEDULER with the three different operating systems used on IBM mainframe computers: DOS/VSE, MVS and VM/CMS. The ADAPTER component enables CA-SCHEDULER to be run on any of the IBM operating systems. Without the specialized technology provided by ADAPTER, CA would have had to develop, support, and market three separate versions of each of its products, such as CA-SCHEDULER, so that the product could be used on a customer's computer regardless of which of the three IBM operating systems it used. ADAPTER is not a separate CA product; it is not marketed as such, and it has no capability of acting as an independent product. Rather, it is a component part of CA-SCHEDULER, as it is of several other CA products.

CA began work on ADAPTER in 1979, and has continued to enhance it even up to the present. When ADAPTER is used as one component of a CA program, the

other component, which contains the task-specific code, is designed to mate with ADAPTER rather than directly with the computer's operating system. This approach followed a concept—operating system independence—that had been successfully used for several years prior to the development of ADAPTER.

ADAPTER was designed and written in 1979 for use with a group of CA's programs called the DYNAM line. CA included a separate copyright notice on ADAPTER with 1979 as the date of first publication. Since 1979, there have been several revisions and changes to ADAPTER code. CA never registered ADAPTER in the copyright office as a separate computer program.

3. ZEKE

James P. Williams of Altai began development of ZEKE in July, 1981, and first installed it at a customer location in June 1982. This original version of ZEKE was available for use only on the VSE operating system, and made all its own service calls directly to the operating system. One of its principal competitors was CA-SCHEDULER, but Williams did not know that SCHEDULER included ADAPTER, nor did he know specifically what CA products used ADAPTER.

4. OSCAR

OSCAR is Altai's operating-system compatibility component. It was first developed in 1984 in a VSE version for use with Altai's ZEKE program. The first version, called OSCAR 3.4, was developed by Claude F. Arney III, who copied approximately 30% of OSCAR's source code from the source code of ADAPTER, which he had taken from CA when he left CA to go to work for Altai as a programmer. Like CA's ADAPTER, Altai's OSCAR is not a separate product; it is not marketed as such, and it has no capability of acting as an independent product.

Version 3.4 was first used in the ZEKE program, and later in Altai's ZACK and ZEBB programs. After this action

was commenced against Altai, OSCAR was rewritten by different Altai programmers as version 3.5, and was substituted for version 3.4 as a component in the Altai programs. Altai concedes that Arney copied from CA's ADAPTER, but claims that he did it without the knowledge of anyone at Altai. Altai further claims that once it was alerted to and had confirmed the illegal copying, right after this action was begun, it rewrote the OSCAR program to eliminate any of the claimed infringements. Whether Altai was successful in its attempted "cleanup" of OSCAR is one of the principal issues in this lawsuit.

E. *Dramatis Personae*

1. James P. Williams

In 1977 James P. Williams was employed by CA, where he became a product manager. He left CA in August 1980 when he went to work for Software Design, Inc., a predecessor to Altai. Currently, he is the President of Altai and has held that position since October 31, 1988. While at CA he was not involved with the actual development of CA's products, and Williams had no responsibilities with regard to ADAPTER. Although he was aware of ADAPTER, he never actually saw the ADAPTER code.

In late 1983 Altai determined, based on customer interest, that it should write ZEKE/VSE so that it could be used on the MVS operating system. Williams, who had developed Altai's VSE version of ZEKE, was the sole programmer at Altai and felt that Altai needed an additional programmer to write the MVS version. At the time, Williams knew about CA's SCHEDULER, which had been developed after Williams left CA, but he was not aware that SCHEDULER used ADAPTER.

Williams approached Arney, who had been a long standing friend and co-worker of Williams even before their days at CA, and invited him to come to work for Altai. Arney was then, and since 1978 had been, an employee of CA,

where he had worked with and helped to develop the VSE version of the ADAPTER component.

2. Claude F. Arney, III.

Arney had been employed by CA as a programmer for approximately five years before he moved to Altai. During that period, Arney did development work on CA's DYNAM/D, DYNAM/T, DYNAM/F1, and ADAPTER programs. In this role, he rewrote or enhanced many portions of ADAPTER/VSE. Arney had no responsibilities, however, for ADAPTER/MVS. For his work, CA permitted him to take home a paper copy of the source code of ADAPTER and anything else he needed to assist him. He did not recall being denied access to any materials by the company.

Arney was approached by Williams in December 1983 about working for Altai. Williams told him that his first project would be to develop an MVS version of ZEKE. Arney had no direct experience with MVS, but he was an accomplished programmer. When he left CA in January 1984, Arney took with him copies of the source code for both the VSE and MVS versions of ADAPTER, even though he recognized that this was contrary to the agreements he had signed prohibiting employees from retaining such copies.

F. *Development of OSCAR 3.4*

When he began work at Altai, Arney discussed with Williams different possible approaches for making ZEKE work with the MVS operating system. Williams, who had developed ZEKE for VSE, estimated that to modify it to run with MVS would require changing approximately 30% of its code. The other 70% worked independently of the operating system.

Williams had not considered at that point using a common system interface either for ZEKE or for any other Altai products. Arney argued, however, in favor of the long-term advantages of the common system interface. After discussing the possibilities, they decided to use the method of

operating system independence, which would place all the system calls in a single program that they ultimately called OSCAR.

After this decision was made, Arney began to write a VSE version of OSCAR. A VSE version was written first, because this allowed Altai to take advantage of its already-working ZEKE/VSE program. In other words, it could be assumed that any difficulties in running ZEKE with OSCAR on VSE systems could be attributable to problems in OSCAR, not in ZEKE.

No one at Altai, other than Arney, knew that Arney had the ADAPTER code, or that he had referred to it when he was writing OSCAR/VSE, a project that took him three months, or when he was writing OSCAR/MVS, which took him an additional month. Only when this lawsuit was commenced did Altai learn that Arney had copied some 30% of the OSCAR code from CA's ADAPTER.

From 1985 to August 1988, Altai used OSCAR 3.4 in its ZEKE, ZACK, AND ZEBB products, unaware of Arney's copying. In late July 1988 CA learned for the first time that Altai may have copied its ADAPTER program. It investigated to confirm the suspicion and then registered for the first time a copyright on versions 2.1 and 7.0 of its CA-SCHEDULER program. Both 2.1 and 7.0 were registered as "derivative works". Having registered the two versions of CA-SCHEDULER, CA commenced this action. CA alleged that by copying ADAPTER into the ZEKE, ZACK, and ZEBB programs, Altai has both infringed CA's copyright and misappropriated trade secrets.

G. *Rewrite of OSCAR 3.4 into OSCAR 3.5*

Upon receiving the complaint, Altai learned for the first time of the possible copying of ADAPTER code into OSCAR. Williams met immediately with Arney to investigate CA's allegations. Arney admitted then that he had copied some of the ADAPTER code. Williams set about immediately to determine the extent of the damage, and he

reviewed with Arney exactly which portions of OSCAR had been copied. In doing so, Williams did not look at the ADAPTER code, but Arney consulted it in identifying which modules of the code had been copied and which had been separately developed either from ZEKE or independently.

At this point Williams consulted counsel about how to go about rewriting the OSCAR program so as to cure the harm done by Arney's improper copying. The first step was to exclude Arney entirely from the rewriting process. The original ADAPTER code was locked up. Williams then assigned to Altai's eight programmers various segments of the program that had to be rewritten.

Williams wrote the parameter lists and gave them to the programmers. In doing so he worked primarily from ZEKE, not from Arney's version of OSCAR. The programmers were denied access to OSCAR 3.4, and were forbidden to talk with Arney during the rewrite process. Williams' goal in following this procedure was to salvage from OSCAR 3.4 the portions that Altai legitimately could use, and to eliminate from it those portions, ultimately determined to be about 30%, that had been copied by Arney from ADAPTER.

All the programmers employed by Altai (with the exception of Arney) were used in the rewriting process. None of them had been involved in developing or enhancing OSCAR. The process of rewriting involved first determining what operating system services were needed by ZEKE; this list was formulated by reference to the version of ZEKE marketed before OSCAR was developed. Williams provided a brief description of each service to a programmer through the parameter lists, and told the programmer to write the appropriate code for obtaining that service from the operating system. After the new code was written, the revised OSCAR was tested and debugged. The entire process took approximately six work-months of effort, and was completed by mid-November 1988, thus producing OSCAR 3.5.

Beginning in November 1989, OSCAR 3.5 was shipped to all new customers. It was also shipped by Altai, as a "free

upgrade", to all customers who had OSCAR 3.4. Delivery of OSCAR 3.5 to all customers, new and existing, was completed by July 31, 1989.

H. *Evaluation of Altai's Rewrite of OSCAR*

If CA's claim of misappropriation of trade secrets did not fail on preemption grounds, it would be necessary to examine in some detail the conflicting claims and evidence relating to the process by which Altai rewrote OSCAR and ultimately produced version 3.5. Since CA's only viable claim is for copyright infringement (see discussion below about preemption of trade secrets misappropriation claim), our attention must be directed not so much to the rewriting process, itself, but to the result of the rewrite. We must determine, in short, whether Altai's OSCAR 3.5 infringes CA's ADAPTER. We make that determination as part of the discussion that follows. Additional facts are included where pertinent to the discussion.

III. DISCUSSION

CA has presented two causes of action: copyright infringement and misappropriation of trade secrets.

A. *Copyright Infringement*

There are two elements of a copyright infringement claim: ownership of a valid copyright, and copying of the plaintiffs copyrighted work by the defendant. *Novelty Textile Mills, Inc. v. Joan Fabrics Corp.*, 558 F.2d 1090, 1092 (2d Cir.1977); *see also Reyher v. Children's Television Workshop*, 533 F.2d 87, 90 (2d Cir.), *cert. denied*, 429 U.S. 980, 97 S.Ct. 492, 50 L.Ed.2d 588 (1976); 3 *Nimmer On Copyright* § 13.01, at 13-4 (1991). On both elements the plaintiff carries the burden of proof.

1. Ownership of a Valid Copyright

Section 102 of title 17 of the U.S.Code provides in part: "Copyright protection subsists * * * in original works of

authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device". The owner of a copyright may register it with the copyright office "[a]t any time during the subsistence of copyright in any published or unpublished work". However, "[s]uch registration is not a condition of copyright protection." 17 U.S.C. § 408(a). The act further provides, in § 411(a), that "no action for infringement of the copyright in any work shall be instituted until registration of the copyright claim has been made in accordance with this title."

Registration has effects in addition to permitting an infringement action. One relates to plaintiff's entitlement to attorney's fees under § 412, as will be discussed later in this opinion. Another effect of a certificate registration is that, if timely obtained, it "constitute[s] *prima facie* evidence of the validity of the copyright and of the facts stated in the certificate." 17 U.S.C. § 410(c). One of those facts is ownership of the copyright. *See Durham Industries Inc. v. Tomy Corp.*, 630 F.2d 905, 908 (2d Cir.1980); 3 *Nimmer On Copyright* § 13.01, at 13-5 to 13-7.

[1] In this case there is no dispute that CA owns a valid copyright in the computer program CA-SCHEDULER 2.1, which contains ADAPTER as one of its components. Plaintiff's exhibit 2 is the certificate of copyright registration for CA-SCHEDULER 2.1, having the effective date of August 19, 1988. By statute, that certificate is *prima facie* evidence of the facts stated therein. It establishes that CA is the author, and Altai does not contest this.

The certificate also states, however, that the nature of the material in which copyright is claimed is "text of computer program". It also states that CA SCHEDULER 2.1 is a "derivative work" whose "preexisting material" was CA-SCHEDULER 1.0. Finally, for our purposes, the certificate states that the material added to CA-SCHEDULER 1.0 "and

in which copyright is claimed" is: "Computer program has been re-written with revised code and added new code."

Thus, as asserted in CA's registration, which provides the basis for this lawsuit, the copyright is of a derivative work based upon a prior version of CA-SCHEDULER. The evidence shows that CA-SCHEDULER 1.0 was never registered. Most significantly, the evidence also shows that the ADAPTER component of version 2.1 was incorporated into version 2.1 from the preexisting version 1.0, and indeed was incorporated into CA-CHEDULER 1.0 from one of CA's DYNAM programs, none of which are shown to have been registered.

Based on these facts, which are undisputed, Altai has argued, with some persuasiveness, that CA may not maintain this suit for copyright infringement of the ADAPTER code. Altai argues essentially that the registration, a precondition to maintenance of this infringement suit, was only of a derivative work and, that according to the statute, "[t]he copyright in a * * * derivative work extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material." 17 U.S.C. § 103(b). That subsection goes on, however, and provides that "[t]he copyright in such work is independent of, and does not affect or enlarge the scope, duration, ownership, or subsistence of, any copyright protection in the preexisting material."

[2] If there were evidence that the ADAPTER code had been placed in the public domain, or was owned by someone other than CA, Altai's argument that the derivative nature of the registration did not extend to the ADAPTER code would be compelling. However, there is no such evidence. On the contrary, the undisputed evidence establishes that ADAPTER was developed by CA originally for CA's DYNAM programs, even before CA-SCHEDULER was developed, and was then incorporated as a separate component into the SCHEDULER versions. In short, CA is the author of the ADAPTER program

and its "copyright protection" subsists without regard to registration. *See Rand McNally & Co. v. Fleet Management Systems, Inc.*, 591 F.Supp. 726, 733 n. 6 (N.D.Il1.1983); *Williams Prods., Inc. v. Construction Gaskets, Inc.*, 206 U.S.P.Q. 622, 624-25 (E.D.Mich.1977) (1909 act); *Rexnord Inc. v. Modern Handling Systems, Inc.*, 379 F.Supp. 1190, 1198 (D.Del. 1974) (1909 act). *Accord 2 Nimmer on Copyright* 7.16[B][2], at 7-164 to 7-165.

Moreover, the court interprets the restriction on commencement of an infringement action contained in § 411(a) as not being a bar to CA's claim in this case. Dr Davis's testimony convincingly established that a computer program such as CA-SCHEDULER 2.1, for which registration was obtained, is made up of a series or collection of sub-programs. many of which are made up of sub-sub-programs, and so on, down for several levels. As Dr. Davis pointed out, it would make no sense to permit the copyright of a computer program that is an operable entity, such as CA-SCHEDULER or ZEKE without including in the copyright protection all of the sub-programs and sub-sub-programs, etc., which are combined with other instructions in order to make up the copyrighted program.

Of course, § 103(b) limits the extent of a copyright in a derivative work to "the material contributed by the author of such work". Here the author is CA, and among the material contributed by CA to CA-SCHEDULER 2.1 was the ADAPTER code. Section 103(b) does contrast the "material contributed by the author" with "the preexisting material employed in the work", and it provides that the copyright "does not imply any *exclusive* right in the preexisting material." (emphasis added). It further provides that the copyright in a derivative work neither enlarges nor diminishes the "scope, duration, ownership, or subsistence of, any copyright protection in the preexisting material."

[3] In short, CA had a subsisting copyright in the ADAPTER code even though ADAPTER was not itself separately registered. CA was the uncontested owner of the code. When CA registered its copyright in CA-

SCHEDULER 2.1 as a derivative work, it was not required simultaneously to register separately every component part, such as ADAPTER, of that work. Otherwise complete copyright protection for a complicated program developed by the same author over a period of time would require dozens if not hundreds of registrations. Plaintiff's exhibit 2, the certificate of copyright registration for CA-SCHEDULER 2.1, was sufficient compliance with the registration requirement of § 411(a) to permit CA to maintain this action against Altai for infringement of ADAPTER.

Confronted at trial with Altai's argument that CA's registration of CA-SCHEDULER 2.1 had a more limited effect than we have just held, CA took what it described as a "belt and suspenders" approach and obtained from the copyright office supplemental certificates of copyright registration, *see* plaintiff's exhibit 299, which purported to amend the original certificates to show that both CA-SCHEDULER 2.1 and CA-SCHEDULER 7.0 were original, not derivative works. CA sought the amended registrations while the trial was pending, and did so without informing either Altai or the court.

The amended certificates were presented to the court with a proposed second amended complaint on the last day of the trial. A number of objections were raised both to the amendment of the complaint and to the admission of the amended certificates into evidence. The court reserved decision on those motions. In view of the ruling made with respect to plaintiff's exhibit 2, the original certificate of copyright registration for CA-SCHEDULER 2.1—that it was sufficient compliance with § 411(a) to permit maintenance of this action—there is little importance left for the amendment of the complaint and the admission into evidence of the supplemental certificate. For the record, however, CA's motion to file a second amended complaint is granted, and the two supplemental certificates of registration, amending plaintiff's exhibits 1 and 2, are admitted in evidence as plaintiffs exhibit 299.

No prejudice is inflicted on Altai by the amendment of the complaint, so leave to amend should be "freely given". *Foman v. Davis*, 371 U.S. 178, 182, 83 S.Ct. 227, 230, 9 L.Ed.2d 222 (1962). *See S.S. Silberblatt, Inc. v. East Harlem Pilot Block*, 608 F.2d 28, 42 (2d Cir.1979); Fed.R.Civ.P. 15(a). This action was prepared and tried on the theory that Altai's OSCAR infringed CA's ADAPTER. CA's "error" was technical in nature; it described version 2.1 as a derivative work. Calling it an original work at the time the original certificate was obtained would not have affected anyone's rights with respect to the work. Correcting the error, even on the last day of the trial, had no direct effect on the evidence or arguments presented during the trial.

[4, 5] Even on a technical level, despite the language of § 411(a) that "no action for infringement * * * shall be instituted" until the copyright claim is registered, an action need not be dismissed simply because the registration occurs after the filing of the complaint. *See, e.g., Frankel v. Stein & Day, Inc.*, 470 F.Supp. 209, 212-13 n. 2 (S.D.N.Y.1979), *aff'd.* 646 F.2d 560 (2d Cir.1980); *Schuchart & Assocs. v. Solo Serve Corp.*, No. SA-81-CA-5, 1983 WL 1147, at *9 (W.D.Tex. June 28, 1983) (Sessions, J.). A formalistic dismissal, followed by a re-registration and commencement of a new action, is unnecessary and would be wasteful. Where, as here, the three-year statute of limitations running from knowledge of infringement had not expired at the time the motion to amend was made, no substantive rights are affected by treating the supplemental registration as relating back to the date of the original registration.

In sum, with respect to the first element of CA's infringement claim, CA has established a subsisting copyright in ADAPTER which has been registered with the copyright office and, therefore, may maintain this suit for infringement.

2. Copying of the Copyrighted Work

The second element of a claim for copyright infringement is that the plaintiff must prove copying of the

copyrighted work by the defendant. In order to prove its work has been copied, generally a plaintiff must—absent the rare instance, such as with OSCAR 3.4, where there is direct evidence of copying—prove "access and substantial similarity between the works, and also show that his expression was 'improperly appropriated,' by proving that the similarities relate to copyrightable material." *Walker v. Time Life Films, Inc.*, 784 F.2d 44, 48 (2d Cir.), *cert. denied*, 476 U.S. 1159, 106 S.Ct. 2278, 90 L.Ed.2d 721 (1986) (quoting *Hoehling v. Universal City Studios, Inc.*, 618 F.2d 972, 977 (2d cir.), *cert. denied*,449 U.S. 841, 101 S.Ct. 121, 66 L.Ed.2d 49 (1980). Unlike the situation with respect to OSCAR 3.4, on which infringement is conceded, there is no convincing direct evidence here that OSCAR 3.5 was copied from ADAPTER. Therefore, as to 3.5, we must consider both access and substantial similarity—the two factors that would allow the court to infer copying on the part of Altai.

a. *Access*

[6] Access is not seriously disputed in this case. Under the prevailing definition, access is "the opportunity to view or to copy" the plaintiff's work. *Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp.*, 562 F.2d 1157, 1172 (9th Cir.1977) (citing *Arrow Novelty Co. v. Enco National Corp.*, 393 F.Supp. 157, 160 (S.D.N.Y.), *aff'd*, 515 F.2d 504 (2d Cir. 1975)); 3 *Nimmer on Copyright* § 13.02[A], at 13-10. Here, Arney took from CA a copy of the source code for ADAPTER. Since Arney personally developed OSCAR 3.4 for Altai, and since Arney admits having used substantial portions of the ADAPTER code in the original version of OSCAR, access, at least with respect to version 3.4 of OSCAR, is established.

With respect to version 3.5, the rewritten version of OSCAR, an argument could be made that Altai did not have access because of the precautions attempted by Altai when it undertook to eliminate from OSCAR those portions of the program that had been copied from ADAPTER. There is conflicting evidence as to Williams' access to the ADAPTER

code during the rewrite process. CA claims that it was accessible to him at least indirectly through his conversations with Arney, particularly at the time that Williams set up the parameter lists for the new OSCAR.

Rather than decide the difficult factual issue that access presents in connection with OSCAR 3.5, the court instead assumes that Altai did have access, but finds that neither Williams nor any of the other programmers who worked on OSCAR 3.5 took advantage of the ADAPTER code that was available to them, either by direct copying or by indirect copying from OSCAR 3.4. Altai's purpose in undertaking the rewrite of OSCAR was to eliminate from it all of the infringing aspects that had been included in version 3.4. The court finds that the Altai employees undertook that effort in good faith and adopted reasonable means to accomplish it.

The question, then, becomes whether Altai did in fact accomplish their objective of developing a "clean" version of OSCAR, and that brings us to the second aspect of the copying element: substantial similarity.

b. *Substantial Similarity*

[7] In most cases the "substantial similarity" inquiry presents the heart of a copyright infringement case; it requires the court to "decide whether the similarities shared by the works are something more than mere generalized ideas or themes." *Warner Bros. Inc. v. American Broadcasting Companies*, 654 F.2d 204, 208 (2d Cir.1981). This inquiry is fundamental, because the copyright act protects only the expression of ideas, and not the ideas themselves. *Baker v. Selden*, 101 U.S. (11 Otto) 99, 25 L.Ed. 841 (1879); *Lotus Development Corp. v Paperback Software International*, 740 F.Supp. 37, 42 (D.Mass.1990) (Keeton, J.); 17 U.S.C. § 102(b). "No amount of proof of access will suffice to show copying if there are no similarities." *Sid & Marty Krofft Television*, 562 F.2d at 1172 (citing *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir.1946)).

In the context of computer programs, many of the familiar tests for similarity prove to be inadequate, for they were developed historically in the context of artistic and literary, rather than utilitarian, works. It may be this inadequacy that led the third circuit, in *Whelan Associates v. Jaslow Dental Laboratory*, 797 F.2d 1222 (3d Cir.1986), *cert. denied*, 479 U.S. 1031, 107 S.Ct. 877, 93 L.Ed.2d 831 (1987), to set forth what now seems to be a simplistic test for similarity between computer programs. In *Whelan*, the court adopted an extremely broad view of copyrightability for a computer program. The court stated that the purpose or function of a utilitarian would be the work's idea, and everything that is not necessary to that purpose or function would be part of the expression of the idea", *id.* at 1236 (emphasis omitted), and therefore protectable by copyright. The purpose, and therefore the "idea", of the program at issue in *Whelan* "was to aid in the business operations of a dental laboratory." *Id.* At 1238. Therefore, "the detailed structure of the Dental lab program is part of the expression, not the idea, of that program". *Id.* At 1239. Elsewhere in its opinion the *Whelan* court elaborated that as part of its broadly-defined "expression", the "structure, sequence, and organization" of a computer program, in addition to its source and object codes, were protected by copyright. *Id.* At 1238-40.

The *Whelan* test is inadequate and inaccurate. Professor Nimmer has pointed out one of its pitfalls: "The crucial flaw in this reasoning is that it assumes that only one 'idea,' in copyright law terms, underlies any computer program, and that once a separable idea can be identified, everything else must be expression." 3 *Nimmer on Copyright* § 13.03[F], at 13-62.34.

In the case at bar, Dr. Davis pointed out further technical flaws in the *Whelan* analysis which render its reasoning inadequate. As he so convincingly demonstrated, a computer program is made up of sub-programs and sub-sub-programs, and so on. Each of those programs and sub-programs has at least one idea. Some of them could be separately

copyrightable; but many of them are so standard or routine in the computer field as to be almost automatic statements or instructions written into a program.

Dr. Davis further explained that a computer program must be viewed both as text and as behavior. The text perspective focuses upon the object code and source code. Although not understandable to people untrained in computer programming, both object code and source code can be expressed in written form. Object code appears as a series of zeros and ones, representing the magnetic polarization of the "bits" that are read by the computer. The source code is a combination of words, symbols, and numbers used by programmers to describe, or provide the basis for, the object code of a particular program.

A computer program, however, is more than a collection of zeros and ones. When properly loaded into a computer and provided with appropriate input from, for example, the keyboard, the program behaves. In a word processing program, for example, text can be deleted, blocks of text can be moved, formatting of documents can be changed; all sorts of operations can be instituted, and these can only be described as behavior. Similarly with a spreadsheet program, numbers can be added, subtracted, multiplied or divided; formulae can be developed to process the results of various computations; information can be inserted, deleted, moved, or processed in various ways. In this way, a spreadsheet program also behaves according to the instructions given to it.

Central to Dr. Davis's criticism of the *Whelan* "structure, sequence, and organization" formulation is the fact that there is no necessary relationship between the sequence of operations in a program, which are part of behavior, and the order or sequence in which those operations are set forth in the text of the program—the source code and object code. As Dr. Davis pointed out, "the order in which sub-routines appear in the program text is utterly irrelevant", and the two views of a computer program, as text and as behavior, are "quite distinct".

Each view—textual and behavioral—has its own structure, sequence, and organization. In the standard jargon of programmers, there is static structure, which refers to the program-as-text view, and dynamic structure, which refers to the program-as-behavior view. The static structure and dynamic structure of a program can be quite different; indeed from dealing with the behavior of a program, *i.e.*, operating it, one can tell virtually nothing about its text. Thus, according to Dr. Davis, "its makes no technical sense to talk simply about the 'structure' of a program, because the term is ambiguous and the distinction [between dynamic structure and static structure] matters."

Whelan, therefore, is fundamentally flawed according to Dr. Davis, by failing to distinguish between the static and dynamic views of a program. When *Whelan* states in footnote 1 that the terms "structure", "sequence", and "organization", are used interchangeably and are intended to be synonymous, the court's view of computer science is "exactly wrong technically; it is precisely because a program is not only text, but also behaves, that these terms (in all their meanings) are not synonymous. The problem is thus compounded: where [prior to *Whelan*] the terms were merely ambiguous, they have now been declared equivalent when they are not."

[8] Going beyond Dr. Davis's analysis, the court notes a possible statutory difficulty that arises when we recognize, as we must, that a computer program "behaves". Section 102(a) provides that copyright protection subsists for original works of authorship including those making up computer programs. Subsection (b) provides, however: "In no case does copyright protection for an original work of authorship extend to any idea, procedure, *process, system, method of operation*, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." (emphasis added). Since the behavior aspect of a computer program falls within the statutory terms "process", "system", and "method of operation", it may be excluded by statute from copyright protection. Indeed, it has been

suggested that computer software is better protected by patent law than by copyright law. Comment, *A Plea For Due Processes: Defining the Proper Scope of Patent Protection for Computer Software*, 85 Nw.U.L.Rev. 1103, 1123-25 (1991). Fortunately, this court need not wrestle with that possible development in the law of intellectual property, because CA's rights in this case are fully protected by viewing the ADAPTER program as text. In determining the similarities between OSCAR and ADAPTER, therefore, our attention turns away from the programs as behavior and focuses more closely on the programs as text, *i.e.*, the source code and object code.

Professor Nimmer suggests that in lieu of the *Whelan* test of "structure, sequence, and organization", a better approach to determining similarities in computer programs can be found in the "abstractions test" first enunciated by Learned Hand in *Nichols v. Universal Pictures*, 45 F.2d 119, 121 (2d Cir.1930), *cert. denied*, 282 U.S. 902, 51 S.Ct. 216, 75 L.Ed. 795 (1931). Professor Nimmer's suggestion is helpful. The abstractions test not only has the endorsement of one of the most distinguished judicial writers on copyright law; it is also the law of this circuit.

> The "abstractions test" of Nichols reads: Upon any work * * * a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the [work] is about and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the [author] could prevent the use of his "ideas" to which, apart from their expression, his property is never extended.

Nichols, 45 F.2d at 121.

[9] As applied to computer software programs, this abstractions test would progress in order of "increasing generality" from object code, to source code, to parameter lists, to services required, to general outline. In discussing the

particular similarities, therefore, we shall focus on these levels.

i. Similarities between ADAPTER and OSCAR 3.4

This question need not detain us long, for Altai concedes that a substantial part, approximately 30 percent, of OSCAR 3.4 was copied directly from the source code of ADAPTER that Arney took from CA. Thus, with respect to OSCAR 3.4, Altai admits infringement. In late 1988, as we have seen, OSCAR was rewritten as version 3.5, which completely replaced OSCAR 3.4 with all of Altai's customers by July 1989. Since OSCAR 3.4 has now been completely abandoned, there is no need for injunctive relief. On this aspect of the case, therefore, there remains only the matter of determining what damages should be awarded to CA for Altai's infringement with OSCAR 3.4 during the period in which that program was used. These damages will be discussed later in this opinion.

ii. Similarities between ADAPTER and OSCAR 3.5

[10] After Altai learned, from the complaint in this action and its ensuing investigation, how Arney had copied from ADAPTER in order to develop OSCAR 3.4, it set about to rewrite the OSCAR program by developing OSCAR 3.5 independent of the ADAPTER code. This rewriting process was described earlier in this opinion. Since there is no direct evidence of copying from ADAPTER to OSCAR 3.5, the point of analysis turns to whether, after the rewrite, OSCAR 3.5 is substantially similar to ADAPTER. If so, it infringes CA's copyright, and CA would be entitled to injunctive relief and damages based on OSCAR 3.5. If not, then there was no infringement by OSCAR 3.5 and this part of CA's complaint should be dismissed.

Based upon all the evidence in the case, the evaluations of Dr. Davis, the court's own evaluations of the reports of the experts for CA and Altai, and the impact on these facts and circumstances of the applicable law of copyright as applied to computer programs, discussed above, the court finds and concludes that—even assuming that Altai had access to

ADAPTER's source code—after the rewrite, OSCAR 3.5 was not substantially similar to ADAPTER, and therefore did not infringe CA's copyright.

CA's expert, Dr. Popper, devoted most of his direct testimony, as set forth in his report, to establishing the similarities between ADAPTER and OSCAR 3.4, an issue that Altai did not contest. The major points of similarity cited by Dr. Popper were object code, source code, parameter lists, macros, and so-called high-level structure.

Dr. Davis addressed the relative importance of these factors to a computer program. He realized that some other cases had approached the problem of substantial similarity by merely counting lines of code identical in the two programs. But as Dr. Davis correctly noted, some code is more important than others. Moreover, with respect to OSCAR 3.5, he found no need for any such detailed analysis of lines of code, because in the revision that was carried out by Altai in developing OSCAR 3.5, there remained virtually no lines of code that were identical to ADAPTER.

With respect to the parameter lists and the macros, there was evidence from which one might infer there had been some copying; at the same time, there was evidence that many, if not most, of the parameter lists and macros were dictated by the functionality of the program. The operation that both ADAPTER and OSCAR had to perform was to translate the calls for operating-system services that were required by the applications program into a form that could be read by the particular operating system. In this case, the operating system was established by IBM and the forms for calls for services from each of the three IBM, operating systems lie in the public domain, because they are intended to be known in the industry and to be used by programmers.

On the other side of ADAPTER and OSCAR, the task-specific side, the calls for services from the operating system are made by different applications programs—SCHEDULER for CA, and ZEKE, ZACK, and ZEBB for Altai. There is no claim that Altai's applications programs infringe the task

components of CA's application programs. Thus, many of the parameters and macros were dictated by external factors and could not be deemed to be infringing.

Dr. Davis found that on the evidence presented he could not make a determination whether the parameter lists and macros of OSCAR 3.5 had been copied to any significant extent from ADAPTER. Although he invited further evidence from the parties' experts on the point, not enough was forth-coming to warrant any further comment by him. As a result, the court finds that—with respect to the parameter lists and macros of OSCAR 3.5—CA has failed to meet its burden of proof of copying, because it has failed to prove "substantial similarity" between those of OSCAR 3.5 and those of ADAPTER.

With respect to the list of services required for ADAPTER and OSCAR, there was considerable overlap, but a great deal of that was required by the demands of functionality and was not attributed by Dr. Davis, nor is it by the court, to direct copying. Furthermore, because the list of services is so extensively determined by the demands of the operating system and of the applications program to which it is to be linked through ADAPTER or OSCAR, it has little importance in the overall picture of similarity.

As to the so-called high-level structure, as reflected in the organization chart, the court accepts Dr. Davis's evaluation that it was not important, because it was so simple and obvious to anyone exposed to the operation of the program.

Taking an overall view of "similarity", Dr. Davis attempted to quantify the relative importance of the various factors of similarity on which CA relied. He evaluated them as follows:

Code	1,000
Parameter Lists	100
Macros	100
List of Services	1
Organization Chart	Nil

As applied to OSCAR 3.5, the factor which is by far the most important—code, rated at 1,000—presents no similarity at all, because the code was rewritten.

The parameter lists and macros, combined, amount to 200, but on these factors, CA failed to carry its burden of proving substantial similarity. Even without a burden-of-proof analysis, however, the evidence is conflicting and, viewed most favorably to CA, would show that only a few of the lists and macros were similar to protected elements in ADAPTER; the others were either in the public domain or dictated by the functional demands of the program. The court thus finds and concludes that there was no substantial similarity established in either the parameter lists or the macros.

The list of services, as viewed by Dr. Davis and accepted by the court, is minuscule in importance and, even when linked with the organization chart, does not present sufficient evidence of substantial similarity to warrant a finding of infringement.

In sum on this point, while OSCAR 3.4 included approximately 30 percent of verbatim copying of ADAPTER's code, when Altai rewrote the program into version 3.5, it eliminated the offending sections of copied code. The method it used for the rewriting process was, as Dr. Davis testified, a reasonable method. As Dr. Davis further testified, Altai's cleanup effort "was clearly what I would describe as—I don't want to trip over legal terms, a good faith effort to correct something that was wrong."

The court finds and concludes that OSCAR 3.5 was not substantially similar to CA's ADAPTER program, that it was not copied from ADAPTER, and that it did not infringe CA's copyright on ADAPTER as contained in any of the registrations for CA-SCHEDULER.

B. *Misappropriation of Trade Secrets*

On the first day of trial, Altai conceded that they would not dispute the merits of CA's misappropriation of trade

secrets claim insofar as they were based on Altai's use of the ADAPTER source code taken from CA by Arney. Therefore, in regard to CA's trade secrets claim, the court will address only the following issues: Does the federal copyright law preempt state trade secret law? Which state's choice of law principles apply? Which state's substantive law applies? If Texas law applies, is CA's claim barred by the Texas statute of limitations? These issues are discussed *seriatim*.

1. Preemption

a. *Law of the case?*

Altai contends that § 301(a) of the copyright act preempts CA's claim for misappropriation of trade secrets. CA's initial line of response is that Judge Mishler's ruling of October 13, 1989, denying Altai's motion for summary judgment on this ground, is the law of the case. In that memorandum order, Judge Mishler held: "The elements of the tort of appropriation of trade secrets through the breach of contract or confidence by an employee are not the same as the elements of a claim of copyright infringement".

[11-14] Generally, when a court has ruled on an issue, that decision should be adhered to by that court in subsequent stages of that same case. *Arizona v. California*, 460 U.S. 605, 618, 103 S.Ct. 1382, 1391, 75 L.Ed.2d 318 (1983). But "[l]aw of the case [only] directs a court's discretion, it does not limit the tribunal's power." *Id.* That discretion is informed, principally, by the concern that disregard of an earlier ruling not be allowed to prejudice the party seeking to benefit under the doctrine. *United States v. Uccio*, 940 F.2d 753, 758 (2d Cir.1991); *United States v. Birney*, 686 F.2d 102, 107 (2d Cir.1982). "Prejudice" in this regard does not mean "harm"; "rather, it refers to a lack of sufficiency of notice" or a lack of sufficient "opportunity to prepare armed with the knowledge that [the prior ruling is not deemed controlling]." *Birney*, 686 F.2d at 107; *see Uccio*, 940 F.2d at 758. Both parties briefed the preemption issue in pre- and post-trial briefs; both parties treated the issue as one which was "in

play". There can not possibly be any prejudice to CA by reconsidering Judge Mishler's preemption ruling.

[15] Additionally, Judge Mishler did not have the benefit of a full development of the facts. His prior ruling was based on a facial analysis of the torts of misappropriation of trade secrets and of copyright infringement; our reconsideration of the issue has the benefit of a full development of the facts of the case as developed at trial. Since we are convinced that an uncorrectable ruling of no facial preemption would be "clearly erroneous", *see Arizona v. California*, 460 U.S. at 618 n. 8, 103 S.Ct. at 1391 n.8, we move to a consideration of preemption based on the facts developed at trial.

b. *Preemption analysts as applied to the facts*

[16] Section 301(a) expressly preempts "all legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106" when the work of authorship in which rights are claimed falls "within the subject matter of copyright as specified by sections 102 and 103" of the copyright act. 17 U.S.C. § 301(a).

There is little dispute that ADAPTER falls "within the subject matter of copyright". It is a computer program, and as such is copyright*able*. *See* 17 U.S.C. § 101. Thus, the court needs only to determine whether CA's trade secrets claim is "equivalent" to the exclusive rights of copyright as enumerated in § 106 of the copyright act.

[17] Section 106 gives the copyright owner the exclusive right to (1) reproduce the work, (2) prepare derivative works based on the work, (3) distribute copies of the work to the public by sale or other transfer of ownership, and, in the case of certain artistic works, (4) perform the work publicly, and, (5) display the work publicly. 17 U.S.C. § 106(1)-(5). It is clear that a right "equivalent to" copyright is one which is infringed by the act of reproduction, performance, distribution, or display. 1 *Nimmer on Copyright*

§ 1.01[B][1], at 1-13. *See also Harper & Row Publishers, Inc. v. Nation Enterprises*, 723 F.2d 195, 200 (2d Cir.1983), *rev'd on other grounds*, 471 U.S. 539, 105 S.Ct. 2218, 85 L.Ed.2d 588 (1985).

CA's second amended complaint contains the following two paragraphs:

> 57. By reason of the facts stated in paragraph 39 and by copying from CA-SCHEDULER into ZEKE, ZACK and ZEBB the various elements stated in paragraphs 39-51, 54 and 55, defendant Altai has infringed [CA's] copyright in CA-SCHEDULER.
>
> 73. Defendant's incorporation into its ZEKE, ZACK and ZEBB programs of the various elements contained in the ADAPTER component of [CA's] CA-SCHEDULER program as set out in paragraphs 39-51, 54 and 55 constitutes the willful misappropriation of the proprietary property and trade secrets of plaintiff [CA].

Thus, CA's complaint states that the very same act—copying the various elements of the ADAPTER component of CA-SCHEDULER into ZEKE, ZACK, and ZEBB—is alleged to be both an infringement of copyright and a misappropriation of trade secrets. At trial, it became apparent that CA's trade secrets claim was based on its evidence that Altai had copied ADAPTER into Altai's OSCAR program.

As the second circuit said in *Harper & Row*, "When a right defined by state law may be abridged by an act which, in and of itself, would infringe one of the exclusive rights [contained in § 106], the state law in question must be deemed preempted." *Id.* 723 F 2d at 200. CA's trade secrets claim, therefore, based as it is upon Altai's copying of CA's ADAPTER program, must be deemed preempted, and the second count of its complaint must be dismissed.

[18] CA argues, correctly, that both commentary and caselaw support the proposition that "a computer program can be copyrighted and still maintain its trade secret status." CA post-trial brief at 17. CA further argues, however, that since

the tort of misappropriation of trade secrets requires proof of elements (*e.g.*, a confidential relationship) not required to prove a copyright claim, there can be no preemption.

CA's arguments embrace only a facial comparison of the torts of misappropriation and copyright infringement—the same limited analysis available to Judge Mishler when he decided the summary judgment motion. In making such a limited comparison, CA misses the point both of *Harper & Row* and of § 301. Merely lining up the elements of the two claims and identifying a difference will not suffice to avoid preemption. Rather, the two claims must be *qualitatively* different. The gravamen of CA's trade secrets claim as proved at trial is that Altai, without authorization, copied ADAPTER into its ZEKE, ZACK, and ZEBB programs. CA's position is that the same act which allegedly constituted a misappropriation of trade secrets also infringed their copyright. Preemption is therefore required, because "the right they seek to protect [via the trade secrets claim] is coextensive with an exclusive right already safeguarded by the Act—namely, control over reproduction and derivative use of copyrighted material." *Harper & Row*, 723 F.2d at 201.

There are, undoubtedly, many differences between copyright and trade secret law: "Trade secret law protects content irrespective of form of expression; copyright law protects form of expression but not underlying ideas." 1 R. Milgrim, *Milgrim on Trade Secrets* § 2.06A[3], at 2-146 (1991). Similarly, trade secret law may be enforced only against defendants having a special relationship to the plaintiff, while copyright law may be enforced against the world. *Compare* Restatement of Torts § 757 with 1, U.S.C. § 106. Further, misappropriation of trade secrets may take place by *acquisition*, *disclosure* or *use* of the secret; copyright infringement may only take place by certain unauthorized *uses* of copyrighted works. *Compare* Rev. Uniform Trade Secrets Act § 1(2) with 17 U.S.C. §§ 106-118, 501(a).

However, the alleged trade secret—ADAPTER—is the same entity in which CA alleges a copyright. While the generic elements of a trade secret and of a copyrightable work differ, the tort of misappropriation as particularly alleged and proved here and the infringement of CA's copyright boil down to the same thing—a right of action for the unauthorized reproduction of, and preparation of derivative works based on, ADAPTER. Merely because the elements of a "trade secret" and a "copyrightable work" are different does not avoid preemption. Section 301 instructs the court to compare "rights"—and the right to be free from trade secret misappropriation through "use", and the right to exclusive reproduction and distribution of a copyrighted work are not distinguishable. The trade secret rights in this case are "equivalent to" the exclusive rights granted to copyright owners under § 106, and are therefore preempted by federal law. *See* 1 R. Milgrim, *Milgrim on Trade Secrets* § 2.06A[4], at 2-150 ("Attention must be paid in each case to determine what plaintiff seeks to protect, the theories in which the matter is though to be protected and the rights sought to be enforced."); *Harvey Cartoons v. Columbia Pictures Industries, Inc.*, 645 F.Supp 1564, 1573 (S.D.N.Y. 1986). *Cf. Warner Bros. Inc. v. American Broadcasting Cos.*, 720 F.2d 231, 247 (2d Cir.1983) ("state law claims that rely on the misappropriation branch of unfair competition are preempted").

Were CA's allegations premised on a theory of illegal *acquisition* of a trade secret, a charge that might have been alleged against Arney, who is not a defendant in this case, the preemption analysis might be different, for there seems to be no corresponding right guaranteed to copyright owners by § 106 of the copyright act. But this is not such a case. Rather, CA has proceeded solely against Altai, and has done so on a theory that the misappropriation took place by Altai's *use* of ADAPTER—the same theory as the copyright infringement count. *See* Copyright Law Revision, H.R.Rep. No. 1476, 94th Cong., 2d Sess. 132, *reprinted in* 1976 U.S. Code Cong. & Admin.News 5659, 5748 (" 'Misappropriation'

is not *necessarily* synonymous with copyright infringement, and thus a cause of action labeled as 'misappropriation' is not preempted *if it is in fact* based neither on a right within the general scope of copyright as specified by section 106 nor on a right equivalent thereto." (emphasis added).

CA's trade secrets claim against Altai is equivalent, nay *identical*, to the claim of infringement of the exclusive rights of reproduction and distribution, both of which are "within the general scope of copyright as specified by section 106." Once the work at issue became a copyrightable "work of authorship", all claims concerning copying became governed, exclusively, by federal law. The interpretation of § 301 offered by CA, on the other hand, "would run directly afoul of one of the Act's central purposes, to 'avoid the development of any vague borderline areas between State and Federal protection.' " *Harper & Row*, 723 F.2d at 200 (quoting H.R.Rep. No. 1476, *supra*, at 130, 1976 U.S.Code Cong. & Admin.News at 5746).

Thus CA—which is the master of its own case—has pleaded and proven facts which establish that one act constituted both copyright infringement *and* misappropriation of trade secrets. The act of misappropriation relied on—copying ADAPTER into OSCAR 3.4—*in and of itself*, also infringed CA s copyright. Under *Harper & Row* and § 301 of the copyright act CA's trade secrets claim is preempted by federal copyright law, and must be dismissed.

It may seem anomalous that, with respect to OSCAR 3.5, the revised, post-suit version of the program, CA has no cause of action for copyright infringement, and fails as well on its trade secrets claim because of federal preemption by the copyright law. If preemption were a doctrine designed only to prevent double recovery, this would be a valid concern. But § 301 of the copyright act represents congress's determination, expressed through the authority of the supremacy clause, that copyright law be subject to uniform national laws.

If there is to be any right of action for CA, congress has said, it has to come under the copyright act, or not at all. "It is clear that failure to meet the required standards for federal [copyright] protection will not negate federal preemption." 1 *Nimmer on Copyright* § 1.01[B], at 1-22.2. Otherwise, failure to comply with the strictures of the copyright act would expand the scope of state protection, *id.*, *see also Mayer v. Josiah Wedgwood & Sons, Ltd*, 601 F.Supp. 1523, 1532 n. 15 (S.D.N.Y.1985), and this would be contrary to congress's intent. *See* H.R.Rep. No. 1476, *supra*, at 131. CA "cannot achieve by [a trade secrets] claim what it failed to achieve under its copyright claim". *Durham Industries, Inc. v. Tomy Corp.*, 630 F.2d 905, 918 (2d Cir.1980).

2. Choice of Law

Even though our preemption ruling eliminates the trade secret issues from the case, we think it advisable to consider briefly the choice of law and statute of limitations questions.

a. *Which State's Principles?*

This action was originally commenced in the district of New Jersey, and transferred to the eastern district of New York pursuant to 28 U.S.C. § 1404(a). In these circumstances, "the transferee court must follow the choice of law rules that prevailed in the transferor court." *Ferens v. John Deere Co.*, 494 U.S. 516, 110 S.Ct. 1274, 1277, 108 L.Ed.2d 443 (1990) (rule applies when plaintiff moves for transfer); *compare Van Dusen v. Barrack*, 376 U.S. 612, 84 S.Ct. 805, 11 L.Ed.2d 945 (1964) (same rule when defendant initiates transfer). Since a transfer under § 1404(a) is only a change of courthouses, and not a change of law, we are obliged to apply, New Jersey's conflict of laws principles. There is no dispute between the parties that New Jersey's choice of law principles apply.

b. *Which State's Substantive Law?*

Similarly, there is no dispute over what choice of law principles New Jersey courts would apply. New Jersey applies a "governmental interest" approach for deciding choice of law issues. *See, e.g., Rose v. Port of New York Authority*, 61 N.J. 129, 139-40, 293 A.2d 371, 376 (1972) (abandoning traditional rule of *lex loci delictus* in favor of the law "having the most significant relationship and closest contacts with the occurrence and the parties"). CA maintains that the "governmental interest" test points to the application of New York law; Altai argues that Texas law should control.

This dispute is relevant only because Altai argues that the Texas statute of limitations would bar CA's trade secret claim, since, according to Altai, Texas does not recognize the "discovery rule" in determining when a cause of action for trade secrets would accrue. The court notes that it would in fact apply Texas law, because the most significant relationship and closest contacts with the occurrence and with the parties is with Texas. However, in light of the following discussion of Texas statute of limitations law, the choice of law is irrelevant; for the result would be the same under either New York or Texas law.

c. *Is the Texas Statute of Limitations a Bar?*

[19] New York's limitations period is three years; under New York law, therefore, the action would be timely, and Altai concedes this. Altai argues that under Texas law, the applicable (two-year) statute of limitations would bar CA's claim. Specifically, Altai argues that Texas does not endorse the "discovery rule", and a Texas court would consider CA's trade secret claims to be time-barred. Were it necessary to reach this issue, the court would reject Altai's argument. Texas courts are moving toward the adoption of the discovery rule in all cases where "it is difficult for the injured party to learn of the negligent act or omission." *Willis. v. Maverick*, 760 S.W.2d 642, 644 (Tex.1988).

In fact, the Supreme Court of Texas has held that the discovery rule for accrual of a medical malpractice claim is a state constitutional imperative. In *Nelson v. Krusen*, 678 S.W.2d 918 (Tex.1984), the Supreme Court of Texas noted that the "open courts" provision of the Texas Constitution means that "the legislature has no power to make a remedy by due course of law contingent on an impossible condition." *Id.* at 921. The "impossible condition" of *Nelson* refers to "cutting off a cause of action before the party knows, or reasonably should know, that he is injured." *Id.* at 922.

Since Altai has stipulated that—prior to August 1988—CA had not discovered, and could not have discovered in the exercise of reasonable care, that Altai had misappropriated CA's trade secrets, the court, absent preemption, would have to consider what relief to CA was appropriate under the trade secrets law of Texas. In view of the federal preemption of the claim, however, it is not necessary to address the merits of CA's trade secrets claim.

C. *Damages*

We turn now to a consideration of the damages to be awarded for Altai's conceded infringement of CA's copyright in CA-SCHEDULER 2.1. The only infringement established was that some of the ADAPTER portion of SCHEDULER was copied by Arney and became some of the OSCAR portion of Altai's ZEKE, later to be included in both ZACK and ZEBB.

OSCAR was originally introduced by Altai in the spring of 1984 as part of its ZEKE/VSE program. Next, an MVS version of ZEKE was developed and marketed, also using OSCAR 3.4. Then ZACK and ZEBB incorporated OSCAR and were marketed. After this lawsuit was commenced in August of 1988, Altai set about rewriting OSCAR into a non-infringing version 3.5. By July 1989 Altai had abandoned any use of OSCAR 3.4 and had fully replaced it with version 3.5 by providing all of its customers with the updated version. Our task, therefore, is to determine the damages that are to be

awarded to CA as a result of Altai's infringing use of OSCAR 3.4 during the roughly five-year period from Spring 1984 to July 1989.

17 U.S.C. § 504 provides that an infringer of copyright is liable for "the copyright owner's actual damages and any additional profits of the infringer, as provided by subsection (b)". Subsection (b), entitled "Actual Damages and Profits", provides:

> The copyright owner is entitled to recover the actual damages suffered by him or her as a result of the infringement, and any profits of the infringer that are attributable to the infringement and are not taken into account in computing the actual damages. In establishing the infringer's profits, the copyright owner is required to present proof only of the infringer's gross revenue, and the infringer is required to prove his or her deductible expenses and the elements of profit attributable to factors other than the copyrighted work.

This section thus authorizes CA to recover for CA's "actual damages" plus Altai's profits. Not surprisingly, the parties do not agree as to how this section of the act should be applied to the circumstances of this case. Most of the damage evidence was presented by expert witnesses on each side.

1. CA's View of Damages

CA's expert, Dr. Robert J. Larner, an economist and vice-president of Charles River Associates, a research and consulting firm headquartered in Boston, Massachusetts, expressed two views of damages, one based on the assumption that the infringement was cured as of July 31, 1991, the other based on the assumption of a cure date of January 31, 1989. For purposes of the present discussion we shall refer only to the calculations relating to January 31, 1989. Dr. Larner calculated CA's damages as follows:

Actual damages (before taxes)	$5,433,546
Altai's Profits	6,890,689
Altai's enhanced good will	1,583,563

Each of these items requires some explanation. To arrive at *CA's actual damages*, Larner determined the number of infringing units sold by Altai, then multiplied that quantity by the prices at which CA was selling its competing programs to produce the assumed additional revenue that CA would have received if it had made all of the Altai transactions. From that figure, Larner subtracted estimated incremental costs to CA had it made the additional sales, yielding the incremental profit that CA would have realized if it had made all of the Altai transactions.

Recognizing that CA would not have made *all* of the Altai transactions, Larner looked to market-share data supplied from an outside source, and then concluded that CA's actual damages represented the incremental revenues multiplied by CA's market share percentage. These calculations for the full period produced the actual damage figure of $5,433,546.

For *Altai's profits*, the second aspect of damages allowed by the statute, Larner turned to that portion of the market share that CA did *not* have and calculated Altai's total related revenues for the period. He did this for each year and for each of the Altai products. As permitted by the statute, he did not take into account Altai's expenses that related to those revenues, but instead left that calculation for Altai to prove. Larner's total figure for Altai's "profit" was $6,890,689.

Larner also included a figure for *enhanced good will*, which, for the relevant period, he calculated to be $1,583,563.

Larner's total damage figure was $13,907,798.

2. Altai's View of Damages

Altai's damage estimates were made by Burton Grad, president of Burton Grad Associates, Inc. of Tarrytown, New York, a firm that serves as consultants to computer software and services companies. Grad calculated his damages based on a slightly different time period than that used by Larner. Grad adopted Altai's fiscal years and calculated damages for those years ending July 31, 1986, 1987, 1988 and 1989.

Thus, his figures begin a few months later than Larner's, and they end six months later. Because no precise reliance is placed by the court on either set of figures, this slight discrepancy in time periods is of no significance for our analysis.

As to *actual damages* claimed by CA, Grad concludes that there are none because, as he states: "There is no evidence that CA lost any sales as a result of Altai's use of OSCAR. Thus, CA should not be awarded any actual damages."

As to *Altai's profits* from the infringement, Grad sets forth two factors: (1) the money Altai saved in developing OSCAR through the infringement, which for the four year period he calculated to be $38,000, plus (2) extra profits Altai earned by being able to deliver ZEKE/MVS into the market place three months earlier, which in his "case 1" example he calculated as $47,000. This produced a total damage of $85,000, which Grad then converted to a present worth of $115,000. He made a further calculation by deducting taxes, but for ease of comparison, the court will consider only pre-tax rather than after-tax damages. Grad also made a separate calculation of damages, using somewhat different assumptions; it produced a still lower estimate of damage at $39,000, but there is no need to discuss it here.

As to the lost *good will* postulated by Larner, Grad took the position that Larner "failed to demonstrate that Altai's good will has been enhanced as a result of Altai's use of OSCAR. Therefore, CA is entitled to no damages for enhanced good will."

Thus, we have two expert witnesses, both ostensibly qualified, and both undoubtedly very well-paid for their opinions. They begin with the same raw data, the sales revenues and expenses for the two companies' competing products plus the market-share information. One expert determines damages to be $13,000,000, while the other finds the damages to be $115,000 (less than 1 percent of the higher amount).

It should not be surprising that the court is not persuaded by either of these "expert" opinions. There are many flaws in both, as pointed out through each opinion's criticism of the other, and through the further expert testimony of Dr. Frederick R. Warren-Boulton, an economist and senior vice-president of ICF Consulting Associates of Washington, DC, called by Altai. Other criticisms of the two damage appraisals are contained in the cross-examination of the expert witnesses as well as in the respective parties' post-trial memoranda. For present purposes it will suffice to indicate simply some of the shortcomings of each opinion.

3. Defects in CA's View

a. *CA's Actual Damages*

[20] Larner's approach assumes that CA would have sold its percentage market share of Altai's infringing sales. This assumption, however, fails to take into account a critical factor: price. CA sells a much more expensive product than did Altai. *Compare Stevens Linen Assocs., Inc. v. Mastercraft Corp.*, 656 F.2d 11, 14-15 (2d Cir.1981). Direct price comparisons between Altai and CA are difficult because of the variety of methods of selling and of the variation in the competing products themselves. *Compare id.* The evidence indicates, however, that CA's prices exceeded Altai's by between 20 and 50 percent. The Grad survey indicates that with many of Altai's customers, price was a substantial factor in determining to buy from Altai opposed to CA.

CA's share of the market, derived from historic sales, indicates that segment of the market that was willing to pay the higher prices charged by CA. There is nothing, however, to support the assumption that Altai's customers, many of whom prefer a cheaper product, would have gone to CA in anything near the proportion that CA was able to select from the overall market.

CA's expert's opinion compounds the "price" problem when it assumes that all of the Altai sales it would have received would generate revenues, not at Altai's price level,

but at CA's price levels. Thus, not only does CA's expert exaggerate the quantity by this assumption, but he inflates the hypothetical sales price as well.

[21] Still another flaw in Larner's opinion is his basic assumption that but-for the infringement, Altai would have marketed no competing product. This flies in the face of the fact that before OSCAR 3.4 was developed, Altai was producing ZEKE/VSE and selling it in competition with CA's SCHEDULER, and that MVS versions of ZEKE, ZACK, and ZEBB could readily have been developed. ZEKE preceded SCHEDULER into the market, and the market-share data show that in 1985 ZEKE/VSE was an established competitor of CA-SCHEDULER/VSE; indeed, as of the end of 1984, ZEKE/VSE had 58 surveyed sites installed as opposed to only 40 for CA-SCHEDULER/VSE.

CA's treatment of its costs is equally unconvincing. It postulates only what it calls "incremental expenses" so that, for example, on a one-year lease of ZEKE/MVS, which brought Altai $7,500 (exhibit B of Larner's opinion, item 312), and for which CA postulates it would have received $15,602 (exhibit C of Larner opinion revised 3/27/90, line 1 for 1986), CA would have incurred costs of only $129.84 (exhibit D of Larner opinion—total for CA SCHEDULER/MVS) plus a sales commission.

Notwithstanding the expert's paid opinion, the real world just doesn't work that way. During pretrial, CA strenuously resisted Altai's attempts to obtain cost data for analysis by Altai. Such basic data was not even provided to Larner, its own expert. Grad testified, credibly, relying only on his general industry background and experience in estimating incremental costs, that it is more consistent with industry norm to assume that variable costs of greater than 50 percent of sales would inevitably be incurred.

Taking another point of view, the court perceives a related defect in Larner's opinion, which seems to ignore the causation requirement in the statute. Actual damages must have been suffered by the copyright owner "as a result of the

infringement". Similarly, profits of the infringer, to be recoverable, must be 'attributable to the infringement".

The picture is further complicated by the fact that the infringed component, ADAPTER, has relatively little sales appeal for customers. Many customers are totally unaware of its presence. Most customers who are aware of the presence of ADAPTER or OSCAR in their programs regard it simply as a means for making the application program work on their particular computer with their particular operating systems.

For some customers, however, having ADAPTER or OSCAR provides an immediate advantage in being able to use in the same office computers having different operating systems. For a few, the problem of "migration" (upgrading a computer system by acquiring a more sophisticated operating system) makes ADAPTER or OSCAR attractive. Migration was of relatively minor significance, however, because it was established at trial that of the roughly 700 locations at which Altai maintained computer programs over the years, only approximately 25 had "migrated". Thus, although CA attempts to establish that ADAPTER or OSCAR are the very heart of the applications programs in which they are installed, implying that without that link to the operating systems there would be nothing else, the facts show that CA's emphasis on the importance of ADAPTER was greatly exaggerated.

Still another problem with CA's calculation of damages is CA's claim that Altai's use of OSCAR 3.4 in, *e.g.*, ZACK/MVS, somehow caused damage to CA's OPERA/MVS, which did not even use ADAPTER. In a theoretical sense, perhaps, if OSCAR were as indispensable to ZACK, as ADAPTER is claimed to be to CA-SCHEDULER, then without OSCAR, ZACK would not exist. But in a practical sense, CA's competitive product OPERA/MVS does exist without ADAPTER, and there is no reason to believe that ZACK could not do likewise.

On a more general level, CA claims to have been caused actual damages in excess of $5,000,000 during the infringing period, yet during this period its market share in the relevant

products increased, its revenues and profits increased dramatically, and there is no evidence that CA lost a single sale to Altai because of the presence of OSCAR 3.4 as a component in the Altai programs. CA did present evidence of three sales lost to Altai, but none of those lost sales could be attributed to the presence of OSCAR. Moreover, as against CA's total revenues for, say, 1987 ($452,000,000), Altai's revenues of $2,600,000 seem almost insignificant.

b. *Altai's Profits from OSCAR 3.4*

[22] The fundamental defect in CA's estimates of Altai's profits is CA's assumption that Altai's complete revenues on sales of products can be equated with profit attributable to one component of those products. In the background is the same assumption that infected CA's actual damage analysis: that OSCAR was essential to the Altai products and that without it, no sales would have been made. As indicated above, the court rejects that assumption.

[23] A sounder approach would be to allocate a fair proportion of the profit on a particular sale to the presence of the infringing OSCAR 3.4. *See Big Seven Music Corp. v. Lennon*, 554 F.2d 504, 509 (2d Cir.1977) ("damages may be recovered only if there is a necessary, immediate and direct causal connection between the wrongdoing and the damages"). This is particularly appropriate in the context of this case because with most customers, the presence of OSCAR was not a factor in their decision to purchase. *Cf. Cream Records, Inc. v. Jos. Schlitz Brewing Co.*, 754 F.2d 826, 828-29 (9th Cir.1985).

CA's calculation of Altai's revenues include not only the revenues received for each of its products during the four fiscal years, but also estimated future revenues, which are now irrelevant in light of the court's finding that OSCAR 3.5 cured the infringement.

CA made no calculation as to Altai's expenses, and they were not required to do so, because the statute places the burden of establishing expenses on Altai. Those expenses,

however, were substantial, and are analyzed in the written testimony of Altai's expert, Grad. They will be discussed in that context.

c. *Altai's Enhanced Good Will*

[24] The fundamental defect in CA's calculation of Altai's "enhanced" good will is, simply, that CA did not prove the existence of such good will. A proper measure of its value would have been to compare pre-infringement value with post-infringement value and to allow the difference. But CA presented *no* evidence of the pre-infringement value of Altai's good will. Furthermore, at least part of CA's good will calculation rested upon revenues for a program, Z/CAT2, which did not use OSCAR and which was not connected by the evidence to the OSCAR-using products of Altai or to the customers who use those products. In short, CA's claim, based on a postulated increase in Altai's good will, fails.

4. Defects in Altai's View

a. *CA's Actual Damages*

[25] Grad would allow CA no actual damages because "there is no evidence that CA lost any sales as a result of Altai's use of OSCAR." The lack of specific evidence is correct, but the fact that some damage occurred must also be recognized. CA, of course, is the giant of the computer software industry. Although minuscule in comparison to CA, Altai was nevertheless a significant competitor with certain of CA's products. When it copied ADAPTER, Altai was able to place in the marketplace a product which it viewed as being more useful than the same product would have been without OSCAR 3.4. Altai's products met with some commercial success, and it defies reason and common sense to assume that its competition using the infringing OSCAR did not cause CA to lose some sales and profits to Altai as a result of the infringement. CA's loss was, of course, not the grossly-exaggerated amount postulated in the Larner opinion, but its damage from this factor cannot be totally disregarded.

b. *Altai's Profits from OSCAR 3.4*

[26] A basic flaw of the Grad opinion on Altai's profits is that it simply disregards the statute. Grad works from a premise of a hypothetical, infringement-free world and concludes that Altai's profits are represented by the money saved through developing OSCAR by infringement rather than by independent research, plus extra profits earned because Altai could deliver ZEKE/MVS into the marketpkace three months earlier. This approach simply ignores the statutory purpose of the profits factor of damages, which is to deprive the infringer of any extra benefits it receives that are attributable to the forbidden conduct.

Altai's own figures indicate a pre-tax profit of $260,000 over the four fiscal years in question Since most of this is attributable to products having OSCAR 3.4 as a component, some portion of it, at least, must be recognized as being attributable to the infringement.

The statute places the burden on the infringer to show its expenses. Altai has met that burden with a fairly extensive cost analysis for each of the products broken down by various categories, all as set forth in exhibits attached to Grad's testimony. As part of that analysis, Grad concludes that during the four-year period, total revenues from the relevant products equalled $13,311,000, applicable costs equalled $13,051,000, leaving a total profit for the 4 years of $260,000 (exhibit E to Grad testimony).

Grad does not recognize that profit figure, however, as a factor in CA's recovery. Instead, he develops two other theories of "what might have been". In addition to ignoring the statute, this approach is far too speculative to be relied upon.

c. *Altai's Enhanced Good Will*

As previously indicated, Grad rejects this element of damages for the reason that CA failed to prove either any change in good will that may have occurred during the period, or even the existence of any good will. *See 3 Nimmer on*

Copyright § 14.02[B], at 14-18 to 14-19. The court agrees with that conclusion.

5. Evaluation and Conclusion as to Damages

[27] As indicated earlier, the court did not find either party's damage analysis very helpful. The highlighted items represent only some of the flaws; others are discussed in the briefs and testimony. Despite the skewed analyses on both sides, the court must reach a decision on damages, and to that task we now turn. Although the fact of damage has been established, a precise calculation of CA's actual damages is not possible. The court, therefore, can only make a "just and reasonable inference" as to the amount of damages. *Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 563, 51 S.Ct. 248, 250, 75 L.Ed. 544 (1931); *see* 3 *Nimmer on Copyright* § 14.02[A], at 14-11 to 14-12 ("courts will make the best possible appraisal of value").

[28] Copying of ADAPTER has been admitted. Approximately 30 percent of the lines of code in OSCAR 3.4 were copied directly from ADAPTER. The significance or the value of the copied material is not necessarily measured by counting lines of code; their qualitative value should also be taken into account. The court finds that one-third of the value of OSCAR 3.4 should be attributed to the infringed portion.

There was a great dispute over the significance or value that OSCAR 3.4, in turn, contributed to the Altai products, ZEKE, ZACK, and ZEBB. Without OSCAR those products could have been, and undoubtedly would have been, produced with direct connections to the relevant operating systems. But the fact remains that they were in fact produced using the infringing OSCAR 3.4. Customers generally were not particularly interested in the advantages that OSCAR provided, but in fact OSCAR did contribute some value in terms of permitting different operating systems to use the program in the same office and in permitting a customer to upgrade to more complicated systems without changing

programs. The court finds that a fair evaluation of the significance of OSCAR 3.4 in the Altai products is one-third of the total value. Thus, the infringing portion to be attributed to the end product is one third times one-third, or one-ninth of the products sold. This fraction may fairly be used to calculate CA's actual damage.

The one-ninth factor cannot, however, fairly be applied to all of the sales, or even to CA's market percentage of those sales, because as we have seen, CA sold at considerably higher prices than did Altai.

CA estimated its actual pre-tax damages at approximately $3,500,000. Three adjustments to that figure are appropriate. First, to allow for the loss in sales that would be caused by CA's higher price levels and Altai's competition with non-infringing products, $500,000 should be deducted.

Second, a more reasonable cost figure should be allowed to reflect the realistic costs, rather than the nominal, variable costs allowed in CA's computation. $500,000 (approximately 17 percent) is a reasonable additional cost allowance, based on the evidence. That would leave a figure of $2,500,000, which represents the net revenues to CA from the sales it would have picked up from Altai.

For the third adjustment, we multiply the net revenues of $2,500,000 by one-ninth, representing the portion of the Altai programs found to be attributable to the infringement, which leaves $277,777 as a just and reasonable inference of CA's actual damages resulting from the infringement.

[29] Turning to the profits gained by Altai from the sales of ZEKE, ZACK, and ZEBB over the four year period, the court accepts the figure of $260,000 indicated by Grad in exhibit E of his opinion at page 5. However, for reasons already indicated, only a portion—the court finds one-third—of those profits "are attributable to the infringement". That one-third amounts to $86,667, representing the profits of Altai that are recoverable by CA. Adding the profits ($86,667) to the actual damages of $277,777, yields total damages

resulting from Altai's infringement of CA's ADAPTER program through its use of OSCAR 3.4 of $364,444.

6. Interest

CA should recover prejudgment interest on the $364,444. For ease of computation the court directs that interest shall be calculated by the clerk at the usual rate from June 1, 1987, approximately the middle date of the infringement period.

D. *Housekeeping Matters*

In addition to the foregoing discussion, there remain a few additional, "housekeeping", matters to clean up.

1. Punitive Damages

In light of the above discussion and conclusions, the court sees no basis for punitive damages against Altai.

2. Attorney's Fees

a. *OSCAR 3.4*

[30] Under § 412 of the copyright act, CA may not be awarded statutory damages or attorney's fees as provided in § 505, because the alleged infringement of ADAPTER by OSCAR 3.4 commenced before the effective date of its registration. ADAPTER was registered, as discussed above, as part of CA-SCHEDULER, in August 1988—well after the infringement by OSCAR 3.4 began. The statute thus bars CA's recovery of attorney's fees for the conceded infringement by OSCAR 3.4

b. *OSCAR 3.5*

[31] The court has found that OSCAR 3.5 did not infringe CA's copyright in ADAPTER. Section 505 of the copyright act provides, in part: "[T]he court may * * * award a reasonable attorney's fee to the prevailing party as part of the costs." 17. U.S.C. § 505. Such an award rests largely within the court's discretionary power, *see, e.g., Peter Pan Fabrics, Inc. v. Jobela Fabrics, Inc.*, 329 F.2d 194 (2d Cir.

1964), and since CA did not prevail in regard to infringement by OSCAR 3.5, the court does not award attorney's fees on that part of the claim. As to Altai, the court sees no compelling reason to shift any portion of its attorney's fees to CA. Accordingly, no attorney's fees shall be awarded to either party.

3. Fees of Dr. Davis

[32] When the court, pursuant to Fed.R.Evid. 706, appointed its own expert, with the agreement of counsel for both sides, it provided that each side in the first instance should pay one-half the fee of Dr. Davis, with the final burden of his fee to be fixed as part of the costs upon entry of the judgment. Costs ultimately lie in the discretion of the court.

With respect to Dr. Davis's fee, the need for his testimony was initially caused by Altai and its infringement of the ADAPTER program, because that infringement produced this lawsuit. The principal issue that remained to be tried, however, related to whether or not OSCAR 3.5 infringed, and on that issue Altai has prevailed. Considering all the factors surrounding this litigation and the testimony of Dr. Davis, including the court's need for that testimony and its impact on the case, the court finds that a fair allocation of his fees would be to leave the parties where they now stand, *i.e.*, with each side having paid one-half of his fees and neither side entitled to any further reimbursement from the other.

4. Costs

Pursuant to Fed.R.Civ.P. 54(d) the court directs that no costs shall be awarded to either party.

5. The French Motion

After this case had been submitted for decision, CA renewed a motion made before trial to modify the confidentiality order entered during the discovery process of this action by removing therefrom certain "confidential" materials that CA wished to use in the prosecution of an action against Altai that was pending in France. In

connection with that motion the parties submitted to the court a series of papers which ultimately stacked up to a height of approximately five inches.

After due deliberation, the court denies the motion.

6. Exhibits

Counsel may pick up from chambers their own exhibits, as well as those documents submitted and marked as the court's exhibits, except for those court exhibits, obviously not confidential, that the court has docketed in the clerk's office. Counsel will, of course, be responsible for preserving those exhibits for use in the event of an appeal. Any exhibits not picked up by September 16, 1991, will be destroyed.

IV. CONCLUSION

The clerk is directed to enter judgment in favor of plaintiff Computer Associates International, Inc. and against Altai, Inc. in the sum of $364,444, plus interest to be calculated on that sum from June 1, 1987.

SO ORDERED.

UNITED STATES COURT OF APPEALS

FOR THE SECOND CIRCUIT
UNITED STATES COURT HOUSE
40 FOLEY SQUARE
New York 10007

GEORGE LANGE III
CLERK

At a stated term of the United States Court of Appeals for the Second Circuit, held at the United States Courthouse, Foley Square, in the City of New York, on the 10th day of December one thousand nine hundred and ninety-seven.

Computer Assoc. Int.

v.

Altai, Inc.

Dkt No: 96-7875

Filed Dec. 10, 1997
George Lange III, Clerk

A petition for rehearing containing a suggestion that the action be reheard in banc having been filed herein by the appellant Altai, Inc.

Upon consideration by the panel that decided the appeal, it is Ordered that said petition for rehearing is **DENIED**.

It is further noted that the suggestion for rehearing in banc has been transmitted to the judges for the court in regular active service and to any other judge that heard the appeal and that no such judge has requested that a vote be taken thereon.

FOR THE COURT
GEORGE LANGE III, Clerk
By: /s/_____
Beth J. Meador,
Administrative Attorney

p o ccc
inbancdn_frm

UNITED STATES COURT OF APPEALS

FOR THE SECOND CIRCUIT
UNITED STATES COURT HOUSE
40 FOLEY SQUARE
NEW YORK 10007

MANDATE

GEORGE LANGE III
CLERK

Dec. 22, 1997
89-CV-0811
Hurley

At a Stated Term of the United States Court of Appeals for the Second Circuit, held at the United States Courthouse, Foley Square, in the City of New York, on the 25th day of September, one thousand nine hundred and ninety-seven.

PRESENT: HON. John M. Walker, Jr.
HON. Joseph M. McLaughlin
Circuit Judges

HON. Denny Chin
District Judge*

DOCKET NO: 96-7875

COMPUTER ASSOCIATES INTERNATIONAL, INC.,
Plaintiff-Appellee,

V.

ALTAI, INC.,
Defendant-Appellant.

Appeal from United States District Court for the Eastern District of New York.

This cause came on to be heard on the transcript of record from the Eastern District of New York and was argued by counsel.

ON CONSIDERATION WHEREOF, it is now hereby **ORDERED, ADJUDGED, and DECREED** that the order of said district court be and it hereby is affirmed in accordance with the opinion of this court.

For the court
GEORGE LANGE III, Clerk
By: /s/
Beth J. Meador
Administrative Attorney

* The Honorable Denny Chin of the United States District Court for the Southern District of New York, sitting by designation.

ISSUED AS MANDATE DEC 15 1997

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT
UNITED STATES COURTHOUSE
40 FOLEY SQUARE – ROOM 1702
NEW YORK, NY 10007

GEORGE LANGE, III
CLERK

GENERAL INFORMATION
(212) 857-8500

March 12, 1997

Stephen D. Kahn, Esq.
Weil, Gotshal & Manges
767 5th Avenue
New York, NY 10153

Susan G. Braden, Esq.
Ingersoll & Bloch
1401 16th St., NW
Washington, DC 20036

Re: Computer Assocs. Int'l. Inc. v. Altai, Inc.,
No. 96-7875 (Argued March 3, 1997)

Dear Counsel:

The panel has received the letter of Susan Braden dated March 5, 1997.

The panel would appreciate receiving from the parties no later than March 26, 1997 letter briefs, not to exceed five single-spaced pages, directed to the question whether and to what extent the Berne Convention affects the ability of a United States federal court to issue the anti-suit injunction requested by Altai in this case.

Very truly yours,

/s/ George Lange, III
George Lange, III, Clerk

MANDATE

EDNY/UNNY
89-CV-0811
PRATT

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

SUMMARY ORDER

THIS SUMMARY ORDER WILL NOT BE PUBLISHED IN THE FEDERAL REPORTER AND MAY NOT BE CITED AS PRECEDENTIAL AUTHORITY TO THIS OR ANY OTHER COURT, BUT MAY BE CALLED TO THE ATTENTION OF THIS OR ANY OTHER COURT IN A SUBSEQUENT STAGE OF THIS CASE, IN A RELATED CASE, OR IN ANY CASE FOR PURPOSES OF COLLATERAL ESTOPPEL OR RES JUDICATA.

At a stated term of the United States Court of Appeals for the Second Circuit, held at the United States Courthouse, Foley Square, in the City of New York, on the 3rd day of April, one thousand nine hundred and ninety-six.

PRESENT: HONORABLE J. DANIEL MAHONEY,
HONORABLE JOHN M. WALKER, JR.,
HONORABLE LEVIN H. CAMPBELL,*

Circuit Judges.

---

* The Hon. Levin H. Campbell, of the United States Court of Appeals for the First Circuit, sitting by designation.

COMPUTER ASSOCIATES INTERNATIONAL, INC.,

Plaintiff-Appellant,

against

ALTAI, INC.,

Defendant- Appellee.

No. 93-7957

APPEARING FOR APPELLANT: Steven D. Kahn,
Weil, Gotshal & Manges,
New York, NewYork.

APPEARING FOR APPELLEE: Susan G. Braden,
Ingersoll and Bloch
Chartered, Washington,
D.C.

CERTIFIED: 4/3/96

EDNY/UNNY
89-CV-0811
PRATT

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

SUMMARY ORDER

THIS SUMMARY ORDER WILL NOT BE PUBLISHED IN THE FEDERAL REPORTER AND MAY NOT BE CITED AS PRECEDENTIAL AUTHORITY TO THIS OR ANY OTHER COURT, BUT MAY BE CALLED TO THE ATTENTION OF THIS OR ANY OTHER COURT IN A SUBSEQUENT STAGE OF THIS CASE, IN A RELATED CASE, OR IN ANY CASE FOR PURPOSES OF COLLATERAL ESTOPPEL OR RES JUDICATA.

At a stated term of the United States Court of Appeals for the Second Circuit, held at the United States Courthouse, Foley Square, in the City of New York, on the 3rd day of April, one thousand nine hundred and ninety-six.

PRESENT: HONORABLE J. DANIEL MAHONEY,
HONORABLE JOHN M. WALKER, JR.,
HONORABLE LEVIN H. CAMPBELL,*

Circuit Judges.

---

* The Hon. Levin H. Campbell, of the United States Court of Appeals for the First Circuit, sitting by designation.

COMPUTER ASSOCIATES INTERNATIONAL, INC.,

Plaintiff-Appellant,

against

ALTAI, INC.,

Defendant- Appellee.

No. 93-7957

APPEARING FOR APPELLANT: Steven D. Kahn, Weil, Gotshal & Manges, New York, NewYork.

APPEARING FOR APPELLEE: Susan G. Braden, Ingersoll and Bloch Chartered, Washington, D.C.

Appeal from the United States District Court for the Eastern District of New York (George C. Pratt, then-United States Circuit Judge for the Second Circuit, sitting by designation).

This cause came on to be heard on the transcript of record from the United States District Court for the Eastern District of New York and was argued by counsel.

ON CONSIDERATION WHEREOF, IT IS ORDERED, ADJUDGED AND DECREED that the judgment of the district court be and it hereby is AFFIRMED.

1. The disposition of this appeal is determined by the response of the Supreme Court of Texas to questions certified

to that court in Computer Associates International, Inc. v. Altai, Inc., 22 F.3d 32 (2d Cir. 1994) ("Computer II"). Computer II, familiarity with which is presumed, outlines the lengthy history of this litigation. The remaining matter in the case is the claim of plaintiff-appellant Computer Associates International, Inc. ("Computer Associates") against defendant-appellee Altai, Inc. under Texas law, which is concededly applicable under familiar diversity of citizenship principles, for misappropriation of trade secrets. The district court dismissed this claim as barred by the two-year statute of limitations set forth in Texas Civil Practice & Remedies Code Ann. § 16.003(a)(Vernon 1986). See Computer Assocs. Int'l. Inc. v. Altai, Inc., 832 F. Supp. 50, 54 (E.D.N.Y. 1993) ("Computer I").

2. In so ruling, the district court rejected Computer Associates' contention that the Texas discovery rule exception to § 16.003(a) should be applied so as to preclude a limitations dismissal of Computer Associates' claim for misappropriation of trade secrets. Computer I, 832 F. Supp. at 52-54. The discovery rule exception postpones the commencement of a limitations period to the date when a claimant knows or should have known (in the exercise of reasonable care and diligence) the nature of his injury. *Id.* at 52 (collecting Texas cases).

3. Computer Associates appealed, contending for application of the discovery rule. We certified the following questions to the Supreme Court of Texas:

> 1. Does the discovery rule exception to § 16.003(a) apply to claims for misappropriation of trade secrets?
>
> 2. If not, would the application to such claims of the two-year limitations period provided by § 16.003(a) contravene the "open courts" provision of article I, § 13 of the Texas Constitution?

Computer II, 32 F.3d at 37 (acting pursuant to 2d Cir. R. § 0.27 and Tex. R. App. P. 114(a)).

4. The Supreme Court of Texas has now answered both questions in the negative. See Computer Assocs. Int'l, Inc. v. Altai, Inc., No. 94-0433, 1996 WL 112172 (Tex. Mar. 14, 1996). We accordingly affirm the judgment of the district court. The mandate shall issue forthwith.

/s/
Hon. J. Daniel Mahoney, U.S.C.J.

/s/
Hon. John M. Walker, Jr., U.S.C.J.

/s/
Hon. Levin H. Campbell, U.S.C.J.

UNITED STATES COURT OF APPEALS
FOR THE
SECOND CIRCUIT

APOSTILLE

I, **Elaine B. Goldsmith, Clerk**, of the United States Court of Appeals for the Second Circuit, and keeper of the records and seal thereof, hereby certify that the documents attached hereto are true copies of:

Computer Associates International, Inc., v. Altai, Inc.

Docket Nos. 91-7893, 91-7935

1. **Amended Opinion filed December 17, 1992**
2. **Second Circuit Judgment**

Now remaining among the records of the Court.

IN TESTIMONY WHEREOF, I hereunto sign my name and affix the seal of the Court at New York, this 8th day of January, 1993.

/s/ Elaine B. Goldsmith
Elaine B. Goldsmith, Clerk

I, **J. Daniel Mahoney**, Circuit Judge, hereby certify that **Elaine B. Goldsmith**, Clerk, whose above name is written and subscribed, is and was at the date thereof, Clerk of this Court, duly appointed and sworn, and keeper of the records and seal thereof, and that the above Certificate by her made and her attestations and records thereof, is in due form of law.

Date: January 8, 1993

/s/ J. Daniel Mahoney
Circuit Judge

I, **Elaine B. Goldsmith**, Clerk, of the United States Court of Appeals for the Second Circuit, and keeper of the records and seal thereof, hereby certify that the Honorable **J. Daniel Mahoney** whose name is above written and subscribed, was on the 8th day of January, 1993, and now is judge of this Court, duly appointed, confirmed, sworn and qualified; and that I am well aquainted with his handwriting and official signature and know and hereby certify the same above written to be his.

IN TESTIMONY WHEREOF, I sign my name, affix my seal, at the City of New York, State of New York, on this 8th day of January, 1993.

/s/ Elaine B. Goldsmith
Elaine B. Goldsmith, Clerk

UNITED STATES COURT OF APPEALS
FOR THE
SECOND CIRCUIT

At a Stated Term of the United States Court of Appeals for the Second Circuit, held at the United States Courthouse in the City of New York, on the 17th day of December, one thousand nine hundred and ninety-two.

PRESENT: HON. FRANK X. ALTIMARI
HON. J. DANIEL MAHONEY
HON. JOHN M. WALKER, JR.,
Circuit Judges

Docket Nos.
91-7893,-7935

COMPUTER ASSOCIATES INTERNATIONAL, INC.,

Plaintiff-Appellant-Cross-Appellee,

-v.-

ALTAI, INC.,

Defendant-Appellee-Cross-Appellant.

Filed Dec. 17
Elaine B. Goldsmith, Clerk

A petition for rehearing having been filed by appellant cross-appellee in the above titled case.

Upon consideration thereof, it is hereby ORDERED:

1. The petition for rehearing is GRANTED:

2. Judge Altimari dissents from the grant of the petition for rehearing.

3. **Further Ordered** that the opinion, filed June 22, 1992, is withdrawn, and that the amended opinion, filed December 17, 1992, is substituted therefor.

Further Ordered that Judgment of the District Court is affirmed in part; vacated in part; and the case is remanded to the district court for further proceedings in accordance with the opinion of this Court.

Further Ordered that the parties shall bear their own costs of appeal, including the petition for rehearing.

Elaine B. Goldsmith, Clerk
By: Edward J. Guardaro

Edward J. Guardaro
Staff Attorney

A TRUE COPY
ELAINE B. GOLDSMITH,
Clerk

By: /s/ Kathy Brown
Deputy Clerk

ISSUED AS MANDATE
1-8-93

CERTIFICATE

I, the undersigned, Elaine B. Goldsmith, acting in my capacity as Clerk of the United States Court of Appeals for the Second Circuit, certify and attest that the amended decision filed by the United States Court of Appeals for the Second Circuit on December 17, 1992, in the matter *Computer Associates International, Inc: v. Altai, Inc.*, CA No. 91-7893, has the force of an adjudicated matter and is a final decision of this Court.

/s/ Elaine B. Goldsmith
ELAINE B. GOLDSMITH
Clerk
United States Court of Appeals
for the Second Circuit

APOSTILE

(Convention de La Ha[Illegible] 5 Octobre 1961)

1. Country: United States of America
   This public document
2. has been
   signed by Elaine B. Goldsmith
3. acting in
   the capacity of Clerk
4. bears the seal/stamp of. . . United States Court of Appeals, Second Circuit

CERTIFIED

5. at New York, NY 6. the January 8, 1993
7. by Clerk, U.S. Court of Appeals
8. No. 93-APO-1
9. Seal/Stamp 10. Signature:

/s/: Carolyn Clark Campbell
Carolyn Clark Campbell

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

FILED
IN CLERK'S OFFICE
U.S. DISTRICT COURT E.D.N.Y.
LONG ISLAND OFFICE
★ AUG 09 1991 ★

ENTERED
★ AUG 12 1991 ★
JUDGMENT
89 CV 0811

COMPUTER ASSOCIATES INTERNATIONAL, INC.,

Plaintiff,

-against-

ALTAI, INC.,

Defendant.

A memorandum and order of Hon. George C. Pratt, United States Circuit Judge, sitting by designation, having been filed on August 09, 1991, constituting findings of fact and conclusions of law as required by Fed. R. Civ. P. 52(a), and directing the Clerk of the Court to enter judgment in favor of plaintiff, Computer Associates International, Inc. and against defendant, Altai, Inc. in sum of $364,444.00, plus interest from June 01, 1987, and without costs, it is

ORDERED and ADJUDGED that judgment is hereby entered in favor of plaintiff Computer Associates International, Inc. and against defendant Altai, Inc. in sum of $364,444.00, plus interest at the rate of 9% per annum from June 01, 1987 to the date of this judgment, August 09, 1991,

in sum of $137,490.04, for a total judgment in the sum $501,934.04; and that no cost are awarded to either party.

Dated: Uniondale, NY
August 09, 1991

ROBERT C. HEINEMANN
Clerk of the Court

BY: /s/Joseph Di Talia
JOSEPH DI TALIA
Deputy clerk-in-charge

PUBLIC LAW 100-568 [H.R. 4262]; OCTOBER 31, 1988

BERNE CONVENTION IMPLEMENTATION ACT OF 1988

For Legislative History of Act, see p. 3706.

An act to amend title 17, United States Code, to implement the Berne Convention for the Protection of Literary and Artistic Works, as revised at Paris on July 24, 1971, and for other purposes.

Be it enacted by the State and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE AND REFERENCES TO TITLE 17, UNITED STATES CODE.

(a) SHORT TITLE.—This Act may be cited as the "Berne Convention Implementation Act of 1988".

(b) REFERENCES TO TITLE 17, UNITED STATES CODE — Whenever in this Act an amendment or repeal is expressed in terms of an amendment to or a repeal of a section or other provision, the reference shall be considered to be made to a section or other provision of title 17, United States Code.

SEC. 2. DECLARATIONS.

The Congress makes the following declarations:

(1) The Convention for the Protection of Literary and Artistic Works, signed at Berne, Switzerland, on September 9, 1886, and all acts, protocols, and revisions thereto (hereafter in this Act referred to as the "Berne Convention") are not self-executing under the Constitution and laws of the United States.

(2) The obligations of the United States under the Berne Convention may be performed only pursuant to appropriate domestic law.

(3) The amendments made by this Act, together with the law as it exists on the date of the enactment of this Act, satisfy the obligations of the United States in adhering to the Berne Convention and no further rights

or interests shall be recognized or created for that purpose.

SEC. 3. CONSTRUCTION OF THE BERNE CONVENTION.

(a) RELATIONSHIP WITH DOMESTIC LAW.—The provisions of the Berne Convention—

(1) shall be given effect under title 17, as amended by this Act, and any other relevant provision of Federal or State law, including the common law; and

(2) shall not be enforceable in any action brought pursuant to the provisions of the Berne Convention itself.

(b) CERTAIN RIGHTS NOT AFFECTED.—The provisions of the Berne Convention, the adherence of the United States thereto, and satisfaction of United States obligations thereunder, do not expand or reduce any right of an author of a work, whether claimed under Federal, State, or the common law—

(1) to claim authorship of the work; or

(2) to object to any distortion, mutilation, or other modification of, or other derogatory action in relation to, the work, that would prejudice the author's honor or reputation.

SEC 4. SUBJECT MATTER AND SCOPE OF COPYRIGHTS.

(a) SUBJECT AND SCOPE.—Chapter 1 is amended—

(1) in section 101—

(A) in the definition of "Pictorial, graphic, and sculptural works" by striking out in the first sentence "technical drawings, diagrams, and models" and inserting in lieu thereof "diagrams, models, and technical drawings, including architectural plans";

(B) by inserting after the definition of "Audiovisual works", the following :

"The 'Berne Convention' is the Convention for the Protection of Literary and Artistic Works, signed at Berne, Switzerland, on September 9, 1886, and all acts, protocols, and revisions thereto.

"A work is a 'Berne Convention work' if—

"(1) in the case of an unpublished work, one or more of the authors is a national of a nation adhering to the Berne Convention, or in the case of a published work, one or more of the authors is a national of a nation adhering to the Berne Convention on the date of first publication;

"(2) the work was first published in a nation adhering to the Berne Convention, or was simultaneously first published in a nation adhering to the Berne Convention and in a foreign nation that does not adhere to the Berne Convention;

"(3) in the case of an audiovisual work—

"(A) if one or more of the authors is a legal entity, that author has its headquarters in a nation adhering to the Berne Convention; or

"(B) if one or more of the authors is an individual, that author is domiciled, or has his or her habitual residence in, a nation adhering to the Berne Convention; or

"(4) in the case of a pictorial, graphic, or sculptural work that is incorporated in a building or other structure, the building or structure is located in a nation adhering to the Berne Convention.

For purposes of paragraph (1), an author who is domiciled in or has his or her habitual residence in, a nation adhering to the Berne Convention is considered to be a national of that nation.

For purposes of paragraph (2), a work is considered to have been simultaneously published in two or more nations if its dates of publication are within 30 days of one another."; and

(C) by inserting after the definition of "Copyright owner", the following:

"The 'country of origin' of a Berne Convention work, for purposes of section 411, is the United States if—

"(1) in the case of a published work, the work is first published—

"(A) in the United States;

"(B) simultaneously in the United States and another nation or nations adhering to the Berne Convention, whose law grants a term of copyright protection that is the same as or longer than the term provided in the United States;

"(C) simultaneously in the United States and a foreign nation that does not adhere to the Berne Convention; or

"(D) in a foreign nation that does not adhere to the Berne convention, and all of the authors of the work are nationals, domiciliaries, or habitual residents of, or in the case of an audiovisual work legal entities with headquarters in, the United States;

"(2) in the case of an unpublished work, all the authors of the work are nationals, domiciliaries, or habitual residents of the United States, or, in the case of an unpublished audiovisual work, all the authors are legal entities with headquarters in the United States; or

"(3) in the case of a pictorial, graphic, or sculptural work incorporated in a building or structure, the building or structure is located in the United States.

For the purposes of section 411, the 'country of origin' of any other Berne Convention work is not the United States.";

(2) in section 104(b)—

(A) by redesignating paragraph (4) as paragraph (5); and

(B) by inserting after paragraph (3) the following new paragraph

"(4) the work is a Berne Convention work; or";

(3) in section 104 by adding at the end thereof the following:

"(c) **EFFECT OF BERNE CONVENTION.**— No right or interest in a work eligible for protection under this title may be claimed by virtue of, or in reliance upon, the provisions of the Berne Convention, or the adherence of the United States thereto. Any rights in a work eligible for protection under this title that derive from this title, other Federal or State statutes, or the common law, shall not be expanded or reduced by virtue of, or in reliance upon, the provisions of the Berne Convention, or the adherence of the United States thereto."; and

(4) by inserting after section 116 the following new section:

"§ 116A. Negotiated licenses for public performances by means of coin-operated phonorecord players

"(a) APPLICABILITY OF SECTION.—This section applies to any nondramatic musical work embodied in a phonorecord.

"(b) LIMITATION ON EXCLUSIVE RIGHT IF LICENSES NOT NEGOTIATED.—

"(1) APPLICABILITY.—In the case of a work to which this section applies, the exclusive right under clause (4) of section 106 to perform the work publicly by means of a coin-operated phonorecord player is limited by section 116 to the extent provided in this section.

"(2) DETERMINATION BY COPYRIGHT ROYALTY TRIBUNAL.—The copyright Royalty Tribunal, at the end of the 1-year period beginning on the effective date of the Berne Convention Implementation Act of

1988, and periodically thereafter to the extent necessary to carry out subsection (f), shall determine whether or not negotiated licenses authorized by subsection (c) are in effect so as to provide permission to use a quantity of musical works not substantially smaller than the quantity of such works performed on coin-operated phonorecord players during the 1-year period ending on the effective date of that Act. If the Copyright Royalty Tribunal determines that such negotiated licenses are not so in effect, the Tribunal shall, upon making the determination, publish the determination in the Federal Register. Upon such publication, section 116 shall apply with respect to musical works that are not the subject of such negotiated licenses.

"(c) NEGOTIATED LICENSES.—

"(1) AUTHORITY FOR NEGOTIATIONS.—Any owners of copyright in works to which this section applies and any operators of coin-operated phonorecord players may negotiate and agree upon the terms and rates of royalty payments for the performance of such works and the proportionate division of fees paid among copyright owners, and may designate common agents to negotiate, agree to, pay, or receive such royalty payments.

"(2) ARBITRATION.—Parties to such a negotiation, within such time as may be specified by the Copyright Royalty Tribunal by regulation, may determine the result of the negotiation by arbitration. Such arbitration shall be governed by the provisions of title 9, to the extent such title is not inconsistent with this section. The parties shall give notice to the Copyright Royalty Tribunal of any determination reached by arbitration—and any such determination shall, as between the parties to the arbitration, be dispositive of the issues to which it relates.

"(d) LICENSE AGREEMENTS SUPERIOR TO COPYRIGHT ROYALTY TRIBUNAL DETERMINATIONS.—License agreements between one or more copyright owners and one or more operators of coin-operated phonorecord players, which are negotiated in accordance with subsection (c), shall be given effect in lieu of any otherwise applicable determination by the Copyright Royalty Tribunal.

"(e) NEGOTIATION SCHEDULE.—Not later than 60 days after the effective date of the Berne Convention Implementation Act of 1988, if the Chairman of the Copyright Royalty Tribunal has not received notice, from copyright owners and operators of coin-operated phonorecord players referred to in subsection (c)(1), of the date and location of the first meeting between such copyright owners and such operators to commence negotiations authorized by subsection (c), the Chairman shall announce the date and location of such meeting. Such meeting may not be held more than 90 days after the effective date of such Act.

"(f) COPYRIGHT ROYALTY TRIBUNAL TO SUSPEND VARIOUS ACTIVITIES.—The Copyright Royalty Tribunal shall not conduct any rate-making activity with respect to coin-operated phonorecord players unless, at any time more than one year after the effective date of the Berne Convention Implementation Act of 1988, the negotiated licenses adopted by the parties under this section do not provide permission to use a quantity of musical works not substantially smaller than the quantity of such works performed on coin-operated phonorecord players during the one-year period ending on the effective date of such Act.

"(g) TRANSITION PROVISIONS; RETENTION OF COPYRIGHT ROYALTY TRIBUNAL JURISDICTION.—Until such time as licensing provisions are determined by the parties under this section, the terms of the compulsory license under section 116, with respect to the public performance of nondramatic musical works by means of coin-operated phonorecord players, which is in effect on the day before the effective date of the Berne Convention Implementation Act of 1988, shall

remain in force. If a negotiated license authorized by this section comes into force so as to supersede previous determinations of the Copyright Royalty Tribunal, as provided in subsection (d), but thereafter is terminated or expires and is not replaced by another licensing agreement, then section 116 shall be effective with respect to musical works that were the subject of such terminated or expired licenses.".

(b) TECHNICAL AMENDMENTS.— Section (1) 116 is amended—

(A) by amending the section heading to read as follows:

"§ 116. Scope of exclusive right in nondramatic musical works: Compulsory licenses for public performances by means of coin-operated phonorecord players";

(B) in subsection (a) in the matter preceding paragraph (1), by inserting after "in a phonorecord," the following: "the performance of which is subject to this section as provided in section 116A,"; and

(C) in subsection (e), by inserting "and section 116A" after "As used in this section".

(2) The table of sections at the beginning of chapter 1 is amended by striking out the item relating to section 116, and inserting in lieu thereof the following:

"116. Scope of exclusive rights in nondramatic musical works: Compulsory licenses for public performances by means of coin-operated phonorecord players.

"116A. Negotiated licenses for public performances by means of coin-operated phonorecord players.".

SEC 5. RECORDATION.

Section 205 is amended—

(1) by striking out subsection (d), and

(2) by redesignating subsections (e) and (f) as subsections (d) and (e), respectively.

SEC 6. PREEMPTION WITH RESPECT TO OTHER LAWS NOT AFFECTED.

Section 301 is amended by adding at the end thereof the following "(e) The scope of Federal preemption under this section is not affected by the adherence of the United States to the Berne Convention or the satisfaction of obligations of the United States thereunder.".

SEC 7. NOTICE OF COPYRIGHT.

(a) VISUALLY PERCEPTIBLE COPIES.—Section 401 is amended—

(1) in subsection (a), by amending the subsection heading to read as follows:

" (a) GENERAL PROVISIONS.— ;

(2) in subsection (a), by striking out "shall be placed on all" and inserting in lieu thereof "may be placed on";

(3) in subsection (b), by striking out "The notice appearing on the copies" and inserting in lieu thereof "If a notice appears on the copies it"; and

(4) by adding at the end the following:

"(d) EVIDENTIARY WEIGHT OF NOTICE.—If a notice of copyright in the form and position specified by this section appears on the published copy or copies to which a defendant in a copyright infringement suit had access, then no weight shall be given to such a defendant's interposition of a defense based on innocent infringement in mitigation of actual or statutory damages, except as provided in the last sentence of section 504(c)(2).".

(b) PHONORECORDS OF SOUND RECORDINGS.—Section 402 is amended—

(1) in subsection (a), by amending the subsection heading to read as follows:

"(a) GENERAL PROVISIONS.— ";

(2) in subsection (a), by striking out "shall be placed on all" and inserting in lieu thereof "may be placed on";

(3) in subsection (b), by striking out "The notice appearing on the phonorecords" and inserting in lieu thereof "if a notice appears on the phonorecords, it"; and

(4) by adding at the end thereof the following new subsection:

"(d) EVIDENTIARY WEIGHT OF NOTICE.—If a notice of copyright in the form and position specified by this section appears on the published phonorecord or phonorecords to which a defendant in a copyright infringement suit had access, then no weight shall be given to such a defendant's interposition of a defense based on innocent infringement in mitigation of actual or statutory damages, except as provided in the last sentence of section 504(c)(2).".

(c) PUBLICATIONS INCORPORATING UNITED STATES GOVERNMENT WORKS.—Section 403 is amended to read as follows:

"Sections 401(d) and 402(d) shall not apply to a work published in copies or phonorecords consisting predominantly of one or more works of the United States Government unless the notice of copyright appearing on the published copies or phonorecords to which a defendant in the copyright infringement suit had access includes a statement identifying, either affirmatively or negatively, those portions of the copies or phonorecords embodying any work or works protected under this title.".

(d) Notice of Copyright Contributions To Collective Works.— Section 404 is amended—

(1) in subsection (a), by striking out "to satisfy the requirements of sections 401 through 403", and inserting in lieu thereof "to invoke the provisions of section 401(d) or 402(d), as applicable"; and

(2) in subsection (b), by striking out "Where" and inserting in lieu thereof "With respect to copies and phonorecords publicly distributed by authority of the copyright owner before the effective date of the Berne Convention Implementation Act of 1988, where".

(e) OMISSION OF NOTICE.—Section 405 is amended—

(1) in subsection (a), by striking out "The omission of the copyright notice prescribed by" and inserting in lieu thereof "With respect to copies and phonorecords publicly distributed by authority of the copyright owner before the effective date of the Berne Convention Implementation Act of 1988, the omission of the copyright notice described in";

(2) in subsection (b), by striking out "omitted," in the first sentence and inserting in lieu thereof "omitted and which was publicly distributed by authority of the copyright owner before the effective date of the Berne Convention Implementation Act of 1988,"; and

(3) by amending the section heading to read as follows:

"§405. Notice of copyright: Omission of notice on certain copies and phonorecords"

(f) ERROR IN NAME OR DATE.—Section 406 is amended—

(1) in subsection (a) by striking out "Where" and inserting in lieu thereof "With respect to copies and phonorecords publicly distributed by authority of the copyright owner before the 102 effective date of the Berne Convention Implementation Act of 1988, where";

(2) in subsection (b) by inserting "before the effective date of the Berne Convention Implementation Act of 1988" after "distributed";

(3) in subsection (c)—

(A) by inserting "before the effective date of the Berne Convention Implementation Act of 1988" after "publicly distributed"; and

(B) by inserting after "405" the following "as in effect on the day before the effective date of the Berne Convention Implementation Act of 1988"; and

(4) by amending the section heading to read as follows:

"§ 406. Notice of copyright: Error in name or date on certain copies and phonorecords".

(g) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 4 is amended by striking out the items relating to sections 405 and 406 and inserting in lieu thereof the following:

"405. Notice of copyright Omission of notice on certain copies and phonorecords.

"406. Notice of copyright Error in name or date on certain copies and phono-records".

SEC. 8. DEPOSIT OF COPIES OR PHONORECORDS FOR LIBRARY OF CONGRESS.

Section 407(a) is amended by striking out "with notice of copyright".

SEC. 9. COPYRIGHT REGISTRATION.

(a) REGISTRATION IN GENERAL.—Section 408 is amended—

(1) in subsection (a), by striking out "Subject to the provisions of section 405(a), such" in the second sentence and inserting in lieu thereof "Such";

(2) in subsection (c)(2)—

(A) by striking out "all of the following conditions—" and inserting in lieu thereof "the following conditions:";

(B) by striking out subparagraph (A); and

(C) by redesignating subparagraphs (B) and (C) as subparagraphs (A) and (B), respectively.

(b) Infringement Actions.—

(1) Registration as a prerequisite.—Section 411 is amended—

(A) by amending the section heading to read as follows:

"§ 411. Registration and infringement actions";

(B) in subsection (a) by striking out "Subject" and inserting in lieu thereof "Except for actions for infringement of copyright in Berne Convention works whose country of origin is not the United States, and subject"; and

(C) in subsection (b)(2) by inserting ", if required by subsection (a)," after "work".

(2) TABLE OF SECTIONS.—The table of sections at the beginning of chapter 4 is amended by striking out the item relating to section 411 and inserting in lieu thereof the following:

"411. Registration and infringement actions.".

SEC. 10. COPYRIGHT INFRINGEMENT AND REMEDIES.

(a) INFRINGEMENT.—Section 501(b) is amended by striking out "sections 205(d) and 411," and inserting in lieu thereof "section 411,".

(b) DAMAGES AND PROFITS.—Section 504(c) is amended—

(1) in paragraph (1)

(A) by striking out "$250", and inserting in lieu thereof "$500"; and

(B) by striking out "$10,000", and inserting in lieu thereof "$20,000";

(2) in paragraph (2)—

(A) by striking out "$50,000.", and inserting in lieu thereof "$100,000."; and

(B) by striking out "$100.", and inserting in lieu thereof "$200.".

SEC. 11. COPYRIGHT ROYALTY TRIBUNAL.

Chapter 8 is amended—

(1) in section 801, by adding at the end of subsection (b) the following: "In determining whether a return to a copyright owner under section 116 is fair, appropriate weight shall be given to—

"(i) the rates previously determined by the Tribunal to provide a fair return to the copyright owner, and

"(ii) the rates contained in any license negotiated pursuant to section 116A of this title."; and

(2) by amending section 804(a)(2)(C) to read as follows:

"(C)(i) In proceedings under section 801(b)(1) concerning the adjustment of royalty rates as provided in section 115 such petition may be filed in 1990 and in each subsequent tenth calendar year, and at any time within 1 year after negotiated licenses authorized by section 116A are terminated or expire and are not replaced by subsequent agreements.

"(ii) If negotiated licenses authorized by section 116A come into force so as to supersede previous determinations of the Tribunal, as provided in section 116A(d), but thereafter are terminated or expire and are not replaced by subsequent agreements, the Tribunal shall, upon petition of any party to such terminated or expired negotiated license agreement, promptly establish an interim royalty rate or rates for the public performance by means of a coin-operated phonorecord player of

nondramatic musical works embodied in phonorecords which had been subject to the terminated or expired negotiated license agreement. Such interim royalty rate or rates shall be the same as the last such rate or rates and shall remain in force until the conclusion of proceedings to adjust the royalty rates applicable to such works, or until superseded by a new negotiated license agreement, as provided in section 116A(d).".

SEC. 12. WORKS IN THE PUBLIC DOMAIN.

Title 17, United States Code, as amended by this Act, does not provide copyright protection for any work that is in the public domain in the United States.

SEC. 13. EFFECTIVE DATE; EFFECT ON PENDING CASES.

(a) EFFECTIVE DATE.—This Act and the amendments made by this Act take effect on the date on which the Berne Convention (as defined in section 101 of title 17, United States Code) enters into force with respect to the United States

(b) EFFECT ON PENDING CASES—Any cause of action arising under title 17, United States Code, before the effective date of this Act shall be governed by the provisions of such title as in effect when the cause of action arose

Approved October 31, 1988.

Page 1

COMMERCIAL COURT
OF BOBIGNY

RULING OF January 20, 1995

Chamber: 7 Record No. 519/95

/text, left margin:/
Index No. 2131/90

COMPUTER ASSOCIATES INTERNATIONAL

v.

FASTER S.A.R.L. ————————

/main body of text:/

PLAINTIFF

- the COMPUTER ASSOCIATES INTERNATIONAL INC. company, 711 Stewart Avenue, Garden City, New York 11580,

Represented by Pierre Lenoir, Esq. (EO957),
attorney(s) at the Paris Bar,
89 Avenue Kleber, 75116 Paris, ASS D1167,
and Campana Barbou Martinez, Esq. (P0112)

- The AGENCE POUR LA PROTECTION DES PROGRAMMES [Program Protection Agency], 119 rue de Flandre, 75019 Paris,

Represented by Pierre Lenoir, Esq. (EO957), attorney(s) at the Paris Bar,
89 Avenue Kleber, 75116 Paris, ASS D1167,
and Campana Barbou Martinez (P0112)

DEFENDANT

- The FASTER S.A.R.L. company,
rue des Chardonnerets
93200 Tremblay Les Gonesse

Represented by Pascal Gourdain, Esq. (D1205)
attorney(s) at the Paris Bar,
10 rue de Castiglione, 75001 Paris,
and Alain Genot, Esq. (P0172)

- The ALTAI SOFTWARE company,
624 Six Flags Drive, Suite 150,
Arlington, TX 76011

Represented by Mr. Dot, Esq. and
Mr. Monta, Esq. (Adm. Depoix-Robain) (D1721)

PARTY COMPELLED TO APPEAR

Mr. Jacques Moyrand, proxy-liquidator of the FASTER company, 22 avenue de la Division Leclerc, 93000 BOBIGNY,

Represented by Pascal Gourdain, Esq., (D1205)
10, rue de Castiglione, 75001 PARIS
and Alain Genot, Esq. (P0172)

MEMBERS OF THE BENCH

During arguments:

Mr. Millot, Reporting Magistrate

PROCEEDINGS

Public hearing on November 25, 1994 before the reporting magistrate appointed by the ruling body.

RULING

Decision reached after hearing from both sides, in the first instance, publicly pronounced by
Judge Bilhol,
Judge Millot, Judge Cayla, Judge Autef, and Judge Dangu,
assisted by Ms. C. Boyez, sworn clerk,
deliberated by
Judge Brandel, Judge Millot, Judge Charrin, Judge Taylor, and Judge Cayla.

General Index No. 2131/90

RULING

SUMMARY OF THE FACTS

The Computer Associates International company, hereinafter referred to as the C.A. company, a company under United States law, developed a software package in the United States entitled CA-SCHEDULER.

This software falls into a category of software usually called a "job scheduler" by professionals, an expression that can be translated into French as "planificateur de travaux" ["job scheduler"].

This software is used in computerized data processing centers to manage, optimize, and control the flow of computer work processed at these computer centers, with respect to the specific characteristics of the computer system (brand, software used by the computer center).

Therefore the functions of these programs result from taking into account these user requirements regarding the organization of the operation of its own programs (for example, a management program for its orders, stock, invoicing, accounting, etc.), and the need to use the computer system resources that it has acquired, by means of a resource operating system that is specific to the manufacturer of the equipment in place in the given computer center.

Thus the structure of a job scheduler very often comprises program modules capable of handling job management functions encountered at any computer center, on the one hand, regardless of the type or brand of equipment used at the computer center, and, on the other hand, modules capable of

issuing commands to the resource operating system, which is specific to the equipment of a given brand and type.

The programming module capable of organizing this dialogue, to "interface" between the organizational functions of the computer center management program and the functions of the equipment resources operating system, in this instance IBM, MVS and VSE, is called ADAPTER by the C.A. company.

In other words, CA-SCHEDULER is comprised of one element that is responsible solely for handling the functions used to manage the computer center applications, which are the functions used for the job scheduler; and of a second element used to translate the commands for using the resources, issued by the first element, for a given operating system using the specific system resources (in this case, MVS or VSE).

In the language of computer experts, the first element issues "system calls" (calls to the functions provided by the operating system), calls that are translated by the ADAPTER module so that they can be understood by specific operating system used at the computer center. The ADAPTER software plays the role of an interface adapter between the parameters issued by the scheduling function, the first element, and the functional parameters of the specific operating system at the computer system on which the job scheduling will be performed.

The functional benefit of such a module, for a software developer, is that only the ADAPTER-type module need be programmed when one wants to adapt a given job scheduling program that has already been developed to a computer system from any manufacturer whatsoever.

The Altai Software company, a company under United States law, hereinafter referred to as Altai, developed three software packages, called "ZEKE," "ZACK," and "ZEBB", also in the United States, which carry out the job scheduler functions operating on IBM systems run on the MVS and VSE operating systems.

Therefore, the Altai company developed a program module similar to the C.A. company's ADAPTER program, capable of

translating the commands resulting from carrying out the computer center management functions that it retains for the MVS or VSE operating systems that manage the IBM system resources. This product exists in two Altai versions, called OSCAR 3.4 and OSCAR 3.5. OSCAR 3.4 was developed at Altai by a programmer who came from the C.A. company.

After a lawsuit for infringement was filed by the C.A. company in the United States in August, 1988, the Altai company rewrote the 30% of the OSCAR 3.4 program "imported" by the programmer who had left the C.A. company. The result of this rewriting effort was OSCAR 3.5. Then OSCAR 3.4 was replaced with OSCAR 3.5 among the clientele, and OSCAR 3.4 was withdrawn as an Altai company product.

On August 9, 1991, a New York Court ruled against the Altai company with regard to the infringement of OSCAR version 3.4, but rejected the C.A. company's demands concerning version 3.5. The Court found that the version rewritten by the Altai company did not have any substantial similarities with ADAPTER, and did not violate the copyright of the C.A. company.

Prior to the United States ruling of August 9, 1991, on January 22, 1990, the C.A. company requested that the High Court of Bobigny order a seizure of infringing goods with respect to the Faster company, which distributed in France the products called "ZEKE," "ZACK," and "ZEBB" on behalf of the Altai company.

In an order dated January 23, 1990, the High Court of Bobigny order the seizure of magnetic tapes containing recordings of the "ZEKE," "ZACK," and "ZEBB" software, including the module OSCAR 3.5. These tapes were seized at the premises of the Faster company on February 2, 1990.

In an order dated April 23, 1990, the Paris Court of Appeals ordered that the seizure be withdrawn upon presentation of a bank guaranty in the amount of 5 million francs.

PROCEEDINGS

It was under these circumstances that the C.A. company and the Agence pour la Protection des Programmes [Program Protection Agency], hereinafter referred to as the APP, in a bailiff's document dated February 15, 1990, brought suit against the Altai and Faster companies, and requested that the Court:

- find the petitions of the C.A. company and the APP admissible, and to find that their petitions are well founded;

- declare and decree that the seizure of infringing goods performed on February 2, 1990 at the premises of the Faster company was proper and valid, and confirm it.

- declare and decree that the Faster and Altai companies did commit acts that constitute infringement of programs, the rights for which are held by Computer Associates International Inc. under the terms of the laws of March 11, 1957 and July 3, 1985, specifically of the ADAPTER sub-routine.

- order the immediate cessation of any act constituting the reproduction and/or marketing and/or use of the programs at issue, with a final penalty of 200,000 francs for each infraction.

- appoint an expert of the court's selection, and entrust to that expert the task of hearing the parties and all persons with knowledge of this matter, to have submitted to him and to require submission to him of all potentially useful documents that are located at the premises of the Faster company, to which the expert shall have access, to determine the scope of the infringement, and to gather all documentation that will allow the Court to assess the prejudice that Computer Associates International Inc. has suffered on account of this violation of its copyright.

- state that in case of refusal or impediment, another expert will be appointed by an order issued upon request.

- order the Faster and Altai companies jointly to pay Computer Associates International Inc. the amount of 5,000,000 francs in provisional damages.

- order the Faster and Altai companies jointly to pay the Agence pour la Protection des Programmes [Program Protection Agency] the amount of 50,000 francs in compensation for the prejudice it has suffered.

- order the confiscation and return to Computer Associates International Inc. of all materials of any kind whatsoever, on which the infringing programs are recorded, as well as any documentation relating thereto.

- order the publication of the judgement, to appear in three newspapers or magazines of Plaintiffs' choice and at Defendants' expense, if needed, in addition to damages.

- in light of the urgency of the matter, order provisional enforcement of the ruling to be issued.

- order the Faster and Altai companies jointly to pay each Plaintiff the amount of 30,000 francs under article 700 of the New Code of Civil Procedure.

- order the Faster and Altai companies to pay all costs.

This case was entered in the general index as No. 2131/90.

On February 15, 1990, the C.A. company and the APP summoned the Altai and Faster companies, for the appointment of an expert whose primary mission was to undertake any operations necessary to determine whether the "ZEKE," "ZACK," and "ZEBB" software bore any similarity to the CA-SCHEDULER software, and in particular whether the sub-routine OSCAR bore any similarity to the C.A. company's ADAPTER sub-routine.

The case was brought to a hearing on March 13, 1990 and on April 10, 1990, when it was returned to the waiting docket until the submission of the report by the expert, Mr. François Wallon.

In a summons dated November 12, 1990, the C.A. company and the APP brought suit against Mr. Moyrand, Esq. in his capacity as proxy-liquidator of the Faster company, appointed in a ruling dated September 25, 1990.

This case was recorded in the general index under No. 9490/90.

In a ruling dated June 4, 1991, this Court, for the proper administration of justice, joined case No. 9490/90 and case No. 2131/90 under the second of these two numbers.

The expert submitted his report on February 14, 1991.

The case was brought to a hearing on June 4, 1991 and July 2, 1991.

On July 2, 1992, the C.A. company and the APP filed their arguments regarding the expert's report, and petitioned that the Court

- allocate to it full benefit of its introductory writ, and
- rule as previously requested with regard to costs.

On July 2, 1991, the board of judges entrusted the duty of investigating the matter to one of its members in his capacity as reporting magistrate, pursuant to articles 861 and following of the New Code of Civil Procedure.

On July 3, 1991, counsel for the Faster company petitioned the Court to take note of the fact that he did not intend to use the programs in issue, particularly since the continuance of the activities of the Faster company had not been approved. He noted that the alleged damages sought by the C.A. company originated before the court-ordered liquidation, and therefore were subject to article 47 of the law of January 25, 1985 regarding the suspension of individual suits.

On September 10, 1991, the reporting magistrate was to receive the parties, but the United States court in New York handed down its ruling on August 9, 1991. At the request of the Altai company, dated August 30, 1991, and in agreement with the C.A. company, the parties wished to postpone the hearing, to study the opinion and to submit further argument.

The case was called before seven hearings of the college of judges from October 1, 1991 through September 10, 1992.

On October 1, 1991, the Altai company petitioned that the Court:

- declare that it does not have jurisdiction regarding the demands made by the Computer Associates International Inc. company, in favor of the United States jurisdictions already hearing this case, the New York Court (Eastern District of New York), or its jurisdiction of appeal.

- further, withdraw from the demands made by the Computer Associates International Inc. company in favor of the United States jurisdictions already hearing this case, the New York Court (Eastern District of New York) or its jurisdiction of appeal, acknowledging the objections that were raised concerning international lispendence or at least intentional connexity.

- further, declare the demands of Plaintiffs inadmissible for lack of legally protected rights.

- further, declare Plaintiffs unfounded in their suit against the Altai Software company, and reject their demands against it since no act of infringement was committed by the ALTAI SOFTWARE company in France, and since it was not at fault in introducing into France the software packages alleged to be infringing.

- further, reject the conclusions, which are not pertinent, in the report of the Expert Mr. Wallon, reject all Plaintiffs' demands, and find OSCAR version 3.5 non infringing.

- declare the Altai Software company admissible and well justified in its counterclaim:

- require the Computer Associates International Inc. company to pay the Altai Software company 500,000 francs in damages, and require the Computer Associates International Inc. company to pay a civil fine of 10,000 francs for filing an improper suit.

- require the Computer Associates International Inc. company to pay 100,000 francs to the Altai Software company by virtue of article 700 of the New Code of Civil Procedure, and

- require the Computer Associates International Inc. company to pay all costs.

On May 14, 1992, the C.A. company petitioned that the Court:

- declare that it does have jurisdiction,

- reject the objections that the Altai Software company raised regarding "international lispendence or at least of international connexity,"

- reject all of the Altai Software company's demands, ends, and arguments, and its counterclaims,

- grant Plaintiff full benefit of its previous writings.

On September 10, 1992, the Altai Software company filed its arguments, requesting that the Court stay its ruling while awaiting the decision of exequatur from the High Court of Paris regarding the enforcement in France of the August 9, 1991 ruling of the United States court.

On September 10, 1992, the board of judges entrusted the duty of investigating the matter to one of its members in his capacity as reporting magistrate, pursuant to articles 861 and following of the New Code of Civil Procedure.

On October 1, 1992, the reporting magistrate, after hearing the final observations from the parties and their pleas, submitted the case for deliberation, for a ruling issued on October 22, 1992, solely with respect to the petition for a stay.

In its ruling dated October 22, 1992, the Court issued a stay while awaiting the decision of the High Court of Paris regarding the petition for exequatur of the ruling of the New York Court of Appeals for the Second Circuit, in the matter of the C. A company v. the Altai company.

The case was brought to a hearing on September 10, 1992 and October 22, 1992.

The C.A. company appealed the stay issued on October 22, 1992. In an order dated January 29, 1993, the Paris Court of Appeals rejected the petition of the C.A. company.

On June 21, 1993, the High Court of Paris declared enforceable in France the decision issued by the United States Court of Appeals for the Second Circuit dated June 22, 1992 and amended by that Court on December 17, 1992, affirming the decision of August 9, 1991 of the Court of the Eastern District of New York rejecting the suit brought by the C.A. company against the Altai company, for infringement of the Adapter module by the Oscar 3.5 sub-routine.

In arguments submitted at the hearing on May 19, 1994, the C.A. company petitioned that the Court:

> Given the ruling of the High Court of Paris dated June 21, 1993, which has become final, grant it full benefit of its introductory writ against the Altai company and Mr. Moyrand, Esq. ex officio as proxy-liquidator of the Faster company.

In arguments submitted at the hearing on June 10, 1994, the Altai company petitioned that the Court:

- grant the Altai Software company the full benefit of its previous arguments, modified in part;
- declare that it does not have jurisdiction with regard to the Altai Software company;
- state and find that the ruling issued by the Court of Appeals of the State of New York on October 22, 1992, exequatured by Order of the High Court of Paris on June 21, 1993, constitutes a demurrer of all the petitions made by Computer Associates with respect to all the Defendants;
- find that the Commercial Court of Bobigny should find the Altai Software company admissible and well founded in its counterclaims;
- order the Computer Associates International Inc. company to pay 500,000 francs in damages to the Altai company, and order the Computer Associates International Inc. company pay a civil fine of 10,000 francs for filing an improper suit;

- order the Computer Associates International Inc. company to pay the Altai Software company the amount of 100,000 francs by virtue of article 700 of the New Code of Civil Procedure, and

- order the Computer Associates International Inc. company to pay all costs.

The case was brought to hearings on September 16, 1994, October 14, 1994, and October 28, 1994.

On October 28, 1994, the board of judges entrusted the duty of investigating the matter to one of its members in his capacity as reporting magistrate, pursuant to articles 861 and following of the New Code of Civil Procedure.

In arguments dated October 25, 1994, and legalized at the hearing by the reporting magistrate, the C.A. company petitioned that the Court:

- grant the C.A. company and the APP full benefit of their previous filings;
- reject the exception regarding jurisdiction and the demurrer invoked by the Altai company;
- reject all of the Altai company's demands, objections, and claims.

On November 25, 1994, the reporting magistrate, having heard final statements from the parties and their pleas, informed the parties that the Court would base its decision on the report by Mr. Wallon and on the facts reported in the United States rulings, and then referred the case for deliberation, with a judgment to be issued on January 20, 1995.

ARGUMENTS OF THE PARTIES

A. Arguments of the C.A. company and the APP

A.1. On the objection regarding jurisdiction raised by the Altai company

The C.A. company contests the argument by the Altai company that all the demands of the C.A. company with respect to the Altai company are necessarily included in the

demand before the New York jurisdiction. This is merely a petition of principle. The Altai company could not take advantage of the order attributing jurisdiction in the United States proceedings, since that agreement was restricted to the United States proceedings.

A. 2. On the demurrer based on the authority of ***res judicata***

The C.A. company opposes the argument advanced by the Altai company, which claims that since the United States decision was issued between the same parties, for the same cause and for the same claim, it enjoys the authority of *res judicata* in terms of this suit, by virtue of article 1351 of the Civil Code.

It maintains that the parties are different and that the object of the suit concerns the protection of its software with regard to French law, whereas the suit submitted to the United States jurisdiction involved protection with regard to United States law.

In application of the principle of territoriality, infringement in France can be judged only by application of French law by a French judge.

A. 3 On the demurrer raised by the Altai company based on the exequatur

The C.A. company recalls that although it is true that the High Court of Paris rendered the United States decision executory, it noted that the Commercial Court of Bobigny is solely responsible for "appreciating its impact on the outcome of the proceeding before it."

A. 4. On the non-protection in France of software written in the United States

The C.A. company stated:

that one must consider the date that the software in issue was written or the date when the Judge ruled that the software was protected in France by virtue of the international conventions.

In fact, prior to March 1, 1989, the Universal Convention applied, and after that date, the Berne Convention applied.

By virtue of the Universal Convention on copyright of Geneva, ratified by the United States on September 16, 1955 and the Berne Convention for the protection of literary and artistic works, ratified by the United States on March 1, 1989, this work benefits from the protection in France granted by the French laws of March 11, 1957 and July 3, 1985.

Moreover, article 51 of the French law of July 3, 1985 provides for application of the law on behalf of a foreign author provided that there is reciprocity. Software is protected in the United States under a specific law dated December 12, 1980, and that protection is extended to French authors.

Pursuant to United States law, the CA-SCHEDULER software was copyrighted by the C.A. company with the Copyright Office in Washington. This software is an original work, which is protected under United States copyright law. In France, the software was registered with the APP on January 25, 1990.

A. 5. On acts of infringement committed in France

The C.A. company maintains that the Altai company was not as indirectly involved in introducing the infringing software into France as it claims; it did import such software into France. It is clear that the Faster company could not have committed acts of infringement if it had not received the means to do so from the Altai company. It is of the opinion that the arguments put forward by the Altai company are marked by the most egregious bad faith. Even if good faith were to be established, such good faith would not suffice to exonerate Altai of the consequences of its faults with respect to article 1382 of the Civil Code.

A. 6. On the expert's report

The C.A. company is of the opinion that the report by the French expert fully justifies its demands.

It notes that the Altai company was obstinate in its refusal to furnish the source codes for the programs in issue.

It contests the argument put forward by the Altai company that it was the United States judge who would not authorize the furnishing of those source codes.

The C.A. company had agreed to not having the documents sent to it, to maintain the confidential nature of those documents, but rather that they should be sent directly to the French expert. The Altai company did not follow up on that proposal.

Nevertheless, the expert was able to study the findings made by the American experts, elements that enabled him to answer the questions asked by the Commercial Court of Bobigny, and to reach the conclusion that infringement had been committed.

Specifically, it was established that Mr. Williams, the president of the software division of the Altai company, was a former employee of the C.A. company, and that in that capacity, he had access to the source code for the ADAPTER program. Likewise, the Altai company benefited from the services of its employee, Mr. Arney, who moved over from the C.A. company, and who acknowledged that he brought along the sources codes for ADAPTER.

The reports of the American experts establish that OSCAR 3.4 is an infringement of the ADAPTER program.

The Altai company was thus required to develop a new version of the OSCAR sub-routine, OSCAR 3.5, which the French expert concluded was an infringement of the ADAPTER sub-routine. In fact, the expert concluded that the manner in which the OSCAR 3.5 sub-routine was rewritten did not follow the rules for "cloning" that are generally accepted in the profession. The C.A. company defines a "clone" as a computer program that has the same functions as an original program.

The expert indicated that OSCAR 3.5 appears, at the technical level, to derive directly and without any creative contribution from OSCAR 3.4, which itself was a copy, in part slavish, of the ADAPTER software of the C.A. company. He added that OSCAR 3.5 maintained the same architecture as ADAPTER, because, instead of starting from scratch, as it

should have done, the Altai company rewrote OSCAR 3.5 by reusing the architecture and modular organization of OSCAR 3.4.

B. Arguments of the Altai company

B.1. On the objection regarding jurisdiction

The Altai company stated that the C.A. company deliberately fails to state its position on the fact that in the context of the United States proceedings, the parties had expressly decided to attribute competence, for litigation underway and for its future developments, to the New York court in an order dated March 10, 1989.

Nevertheless, the Altai company restricted its demand on the objection regarding jurisdiction to the demands made by the C.A. company against the Altai company, and not those made against the Faster company.

It based its demand on the duplication that this suit represents with regard to the demands made in the United States suit. In fact, the C.A. company was seeking an injunction on the distribution of software containing OSCAR 3.5 outside the United States, and was seeking damages in the amount of the entire sales figure realized by the Altai company with its foreign distributors.

The Altai company was never present in France, and in order for there to have been distribution of infringing works in France, those works would have had to be declared infringing, which was not the case.

B. 2. On the demurrer based on the authority of ***res judicata***

The Altai company maintains that the United States decision, an exequatur of which was obtained, was in fact issued between the same parties, for the same cause, and for the same claim as those involved in the French proceedings.

a) same parties

It maintains that the Faster company lacked status as a real and serious defendant to the extent that Faster is in liquidation and is not pursuing its activities, any injunction being pointless, and any demand for damages is bound to fail, to the extent that, by application of law, the liquidation involves the cessation of individual pursuits;

b) same cause

The same cause is clear, since this is an attempt on the part of the C.A. company to obtain a decision that OSCAR 3.5 is an infringement of ADAPTER;

c) same claim

Altai produced a document originating from C.A., where one reads that the C.A. company acknowledges that the demands it has made in France are "virtually identical to those in the suit filed in the United States."

Moreover, the object of the United States suit was to obtain a worldwide judgment against Altai, and to win damages in the amount of total sales realized by the Altai company with its foreign distributors, including the Faster company, in particular.

It underscores that although it is true that the C.A. company also brought suit against the Faster company in France, it is difficult to imagine that the Faster company could be found guilty of infringement whereas the United States court acknowledged that the Altai company did not commit any act of infringement in designing and exporting software from the United States, particularly in that United States and French law are equivalent where matters of software infringement are concerned.

Therefore the authority of *res judicata* applies to everything that was decided by the United States judge.

The exequatur decision has executory force in France, and it follows that the United States decision prevents the C.A. company from claiming before the French judge that the OSCAR 3.5 software is an infringement of the ADAPTER software.

B. 3. On the demurrer based on the exequatur

The Altai company maintains that with regard to infringement, United States law and French law are equivalent. It bases its claims on the law of May 10, 1994, according to which "the ideas and principles that are the basis for any element whatsoever of a computer program, including those that are the basis for its interfaces, are not protected under copyright." It also recalls a decision of the Court of Cassation, in which copyright is not extended to elements that result from "automatic and constraining logic." The principles applied by the United States judge are thus similar to those applied under French law. It maintains that the purpose of the exequatur decision is not to enforce the United States decision in France, but to secure recognition of its incontestable nature before French courts. Decisions with the authority of *res judicata* are opposable absolutely with regard to third parties.

B. 4. On the non-protection in France of software written in the United States

The Altai company states that the ADAPTER software was not protected by the Berne Convention, because the Altai company sent software containing OSCAR 3.5 on January 10, 1989, whereas the United States signed the Berne Convention on March 1, 1989.

Likewise, the Universal Convention of Geneva is not applicable because it concerns materially reproducing and making available to the public of copies of the work, enabling the public to read it and to take visual cognizance of it.

Clearly software is not publishable, under the terms of the Convention, and so software is not covered by the Universal Convention of Geneva.

Consequently, at the time the Altai company is alleged to have participated in an act of infringement, the C.A. company did not enjoy any right protected in France.

B. 5. On acts of infringement committed in France

The Altai company states that the OSCAR 3.5 software in issue was designed entirely in the United States by the Altai company. Therefore, it did not commit any act of infringement in France, since the Altai company limited itself to exporting this software.

B. 6. On the expert's report

The Altai company recalled that it did not furnish the source codes to the French expert because the United States judge, in an order dated December 9, 1988, had forbidden the parties to divulge the confidential documents submitted in that case. This order, justified by the competition between the companies in the United States proceedings, was upheld in a ruling dated August 9, 1991, in response to a request from the C.A. company, which sought to modify the order of December 9, 1988.

Since it has been established that there are no identical features between the source codes for the ADAPTER and OSCAR 3.5 modules, one might legitimately ask what a comparison of the source codes would have contributed.

The Altai company underscored that the French expert claimed to reach his conclusions based on interpretation on a few scattered elements from the United States proceedings, whereas, according to French procedure, article 232 of the New Code of Civil Procedure, he was required to make personal observations.

The expert acknowledged that he had not been able to assess the similarities or functionally identical features in ADAPTER and OSCAR 3.5. He believed that he was authorized to reach a conclusion by criticizing the method used by the Altai company, and not the result achieved by that company, contrary to the approach of the United States judge, whose attention was focused on the results of the rewriting process, rather than on the rewriting process per se.

Although the French expert finds that it is beyond doubt that OSCAR 3.5 was developed on the basis of the modular

organization of OSCAR 3.4, the American expert forwarded the hypothesis that all the functions and organization of the modules could derive from the services required by the Altai company's scheduler. The Court of Appeals for the Second Circuit confirmed that all the functions of the program were dictated by the nature of the programs with which OSCAR was supposed to interact, and that consequently this aspect of the modular structure of ADAPTER and OSCAR was not protected.

The Altai company noted that what Mr. Wallon presents as being the rules of the profession regarding the development of a clone is not acknowledged, specifically by Mr. Augendre, an expert in computer science authorized by the Court of Cassation.

Therefore, the Altai company believes that Mr. Wallon's conclusions are not pertinent.

DISCUSSION

1. On the exception concerning jurisdiction raised by the Altai company

On its admissibility

Since the exception regarding jurisdiction was raised prior to any defense on the substance of the issue, the Court declares the exception admissible.

On its merits

The C.A. company, a company under United States law, and the Agence pour la Protection des Programmes [Program Protection Agency], a non-profit association organized under the law of 1901, served a summons on Altai, a company under United States law, and Faster, a limited liability company under French law, based in Tremblay les Gonesse in Seine Saint Denis, to determine whether the OSCAR 3.5 product, developed by Altai in the United States and distributed by the Faster company, is an infringement of ADAPTER, a product developed by the C.A. company.

The Court determines that it must respond to the particular request of APP with respect to the Faster company, both entities under French law that are not party to the case judged in the United States and, since it finds no reason for exception regarding the location or the subject matter of the suit that has been brought, declares that it does have jurisdiction.

2. On the demurrer based on the authority of ***res judicata*** *raised by the Altai company*

Under the terms of article 1351 of the Civil Code, the legal effect of *res judicata* is applicable only to the claim decided by the judgment when:

the claim is the same,
the claim is based on the same cause, and
the claim is between the same parties, and made by

those parties and against those parties in the same capacity.

The Court states that all of these conditions are clearly not met at the same time in this instance, if only because APP and the Faster company are present in this instance, and therefore the Court rejects the Altai company's request on these grounds.

3. On the demurrer based on the exequatur raised by the Altai company

In the reasons adduced for its judgment, the High Court of Paris noted the following:

"It is appropriate to render thus decision enforceable in France so that the Altai company may advantageously introduce it into the arguments in the litigation between it and the C.A. company before the Commercial Court of Bobigny, which is solely responsible for appreciating its impact on the outcome of the proceeding before it."

In the context of the freedom of this assessment, given the fact that the parties in question are different, of which both the APP and the Faster company are companies under French law, that the United States decision was made with reference to United States law which, even if it is close to French law with regard to the protection of literary and artistic works, cannot be completely and immediately identified with French law without an analysis of the facts under French law. Jurisprudence on the matter of software protection is in flux, as the United States decision shows, with each case having to be considered individually; therefore the Court rejects this demurrer raised by the Altai company, based on the exequatur ruling.

4. On the lack of protection in France of software created in the United Stares invoked by the Altai company

With particular regard to the non-applicability of the Berne Convention, the Altai company, to support its

argument, produced an export document dated January 10, 1989, before March 1, 1989, the date that the Berne Convention was signed by the United States.

The Court notes that this document concerns four manuals and four magnetic tapes, whereas the actual seizure of property performed at the premises of the Faster company concerned five magnetic tapes and eight manuals.

Therefore, the Court states that the Altai company does not provide any evidence that all of its exports were done prior to the date on which the Berne Convention was signed by the United States, all the more so since all software is often the object of upgrades, in the form of successive releases intended to correct certain bugs, and states that the software exported by the Altai company, reciprocally, enjoys the protection provided under French law, in the category of literary and artistic property.

5. *On the acts of infringement committed in France by the Altai company*

Since the Altai company bases its argument on the fact that the OSCAR 3.5 software package was entirely conceived and produced in the United States, software that was acknowledged by the United States judge as being non-infringing, and since it merely exported its software, cannot be sought out in France.

This argument is rejected by the Court, because it assumes absolute identity of French and United States law as to the assessment of potential infringement when disputed products are simultaneously distributed in France. Whatever undeniable areas of convergence of rights there may be regarding protection in the two countries, this alleged identity cannot be accepted.

1. On the expert's report

It must first be noted that the report by Mr. Wallon, the French expert, was written without his having access to the source code, whereas the United States experts, Dr. Charles Popper, for the C.A. company, and Mr. Allison for the Altai company, as well as Mr. Davis, the expert appointed by the United States judge, did have such access.

Mr. Wallon also did not have access to supplemental information resulting from the testimony that ran for several days in the United States proceedings.

To write his report, filed on February 14, 1991, Mr. Wallon could not, therefore, benefit from the same technical documentation as those referred to in the New York decision dated August 9, 1991, nearly six months later.

Mr. Wallon based his decision, namely that:

"OSCAR version 3.5 appears, on the technical level, to derive directly and without original contribution from OSCAR 3.4. OSCAR 3.4 was itself a copy, in part slavish, of the Computer Associates software package ADAPTER" on the following elements:

1) Clearly OSCAR 3.5 was developed on the basis of the organization of OSCAR 3.4 into modules, and on the functions of those modules.

2) A small portion of the code for OSCAR 3.5 was rewritten (6,700 lines out of 36,000 lines), and modified for formal compliance with law and jurisprudence in the United States.

3) No formal proof has been found that OSCAR 3.5 is the result of cosmetic changes to of OSCAR 3.4.

4) There is no doubt that the Altai company did not follow the rules acknowledged by professionals in the development of OSCAR 3.5.

On point 1:

The Court notes that the United States Court stated that:

> The identical features that appear between the lists of services required of ADAPTER and OSCAR 3.5 were the consequence of mandatory requirements resulting from the operating system and the application program with which it was to be linked by means of ADAPTER or OSCAR 3.5.
>
> In his analysis, the United States judge did not attribute any particular value to the similarities that exist between the organizational charts of these two programs, because these charts were extremely simple and obvious for anyone familiar with how this type of program operates.

It is clear that the impact of programming techniques learned by all programmers is all the more evident when it comes to service type programs that are of minor importance.

Therefore the Court states that the structural identity between ADAPTER and OSCAR 3.5 cannot be taken as the basis for infringement.

On point 2:

The Court notes that Mr. Davis, in his report, states that:

> After the revision done by the Altai company in developing OSCAR 3.5, there was virtually not a single line of code left identical to that of ADAPTER. As for the lists of parameters and the macros, although there were some signs that might suggest that there had been copying, at the same time there were signs indicating that most of the parameters, if not all, were imposed by the functions of the program.

The Court states that the analysis of the lines of the program does not make it possible to establish that there was infringement between ADAPTER and OSCAR 3.5.

On point 4:

In his report, Mr. Wallon specifies the method to be used when one wants to make a "clone" of a program.

Mr. Wallon defines a clone, for the purposes of computer technology, as:

> a program whose functions are strictly identical to its model, which it can replace fully.

The Court notes that OSCAR 3.5 is not a clone of ADAPTER, according to this definition, since the two programs receive data from different programs, namely from the job scheduling module in OSCAR 3.5 for the first, and the ADAPTER scheduling module for the second.

It is undisputed that these two scheduling programs do not infringe each other, even though their functions are very similar; those functions are dictated by the manner in which the job flow is handled in a computer center.

Two automobile production lines necessarily bear a strong resemblance to each other, dictated by the logic of dealing with the problem.

Although it is quite possible that Mr. Williams was familiar with OSCAR 3.4, it has been determined, through the analysis of the United States documentation, that his function at the Altai company is in management, and had no impact on the programming of OSCAR 3.5.

Moreover, it has been admitted, as the basis of the United States decision, that none of the programmers who created the OSCAR 3.5 module was involved in developing and testing OSCAR 3.4, and that access to OSCAR 3.4 was not permitted for the OSCAR 3.5 programmers.

It must be noted that it was in the best interests of the Altai company, at a time when it was the object of a lawsuit for infringement regarding OSCAR 3.4, the origin for the reprogramming of OSCAR 3.5, not to engage in a method that could be a cause of reproach, all the more so since the level of expert involved in the proceedings would have made it possible to uncover any attempt at simple cosmetic changes.

Under these circumstances, it does not seem possible to conclude that infringement occurred as a result of a failure to follow the cloning ("clean room") method as customarily

practiced, because the result of work done by the programmers must take precedence over the method used, which, in the final analysis, cannot be considered a determining factor in and of itself.

Wherefore, the Court does not accept any of the above points, and does not uphold Mr. Wallon's conclusion regarding the finding of infringement.

7. On infringement

To reach a finding of infringement under French law, it must be noted that the concept of the originality of a work, particularly software, must be understood subjectively, as the imprint of the personality of its creator. This imprint must be discovered based on the possible choices that are open to that creator.

Originality must be perceived through the mark of an intellectual contribution that involves a minimum threshold of creativity, a contribution of novelty that goes beyond the implementation of automatic and constraining logic.

Before entering into an analysis of the merits to determine whether or not infringement has been committed, certain preliminary comments must be made:

OSCAR 3.5 is a service program of modest proportions, since it is acknowledged that it took six months of development. Its primary function is to link the job scheduling program module of a computer center with the operating system module. It receives as input the parameters that are sent by the scheduling module, so that its output consists of commands suited for the operating system, i.e. according to the interface imposed by that system.

The scheduling program/OSCAR 3.5 interface introduces into OSCAR 3.5 a structuring principle for the functions to be programmed, to meet the expectations of the job scheduling program.

Reciprocally, the operating system OSCAR 3.5 interface introduces a structuring principle on the functions to be provided by OSCAR 3.5, to meet the expectations of the

operating system. These two structuring principles together leave the programmer all the less freedom, especially because two scheduling functions necessarily present significant similarities, and the program is a service program, and not that significant a one at that.

Consequently,

the originality of the "ZEKE," "ZACK," and "ZEBB" programs is concentrated in the job scheduling module, a module which is not the object of an infringement suit. The OSCAR 3.5 module is "stuck" between the interface generated by the "ZEKE," "ZACK," and "ZEBB" scheduling programs, and the interface defined by IBM, which allows access to the operating system.

These two interfaces generate a constraining logic, which is clear in the organization of the program, which justifies the fact that the United States judge did not attach any significance to

> the similarities that exist between the organizational charts of the two programs, because these charts were extremely simple and obvious for anyone familiar with how this type of program operates.

Programs of the ADAPTER or OSCAR 3.5 type are part of service programs, done in all companies, for every program that is supposed to function with the MVS or VSE operating system, with the help of programming techniques shared by programmers, and so it is not at all unusual to find a certain degree of similarity between two service modules at the level of how the program is organized, or even the use of the same types of macros.

In conclusion:

Since the source codes analyzed by the United States experts were deemed to be different, and the architecture and the organization of the program have similarities that are dictated by constraining logic, and the interfaces are not subject to protection,

the Court finds that OSCAR 3.5 is not an infringement of ADAPTER.

On the damages sought by the Altai company and the Faster company

It is clear from the report on the seizure of magnetic tapes on February 2, 1990 at the premises of the Faster company that the "ZEKE," "ZACK," and "ZEBB" products were the only products distributed by that company. The Faster company was placed into compulsory liquidation on September 25, 1990. It cannot be maintained that the suit brought by the C.A. company did not have a negative impact on the business activity of the Faster company.

Therefore the Court with sovereign power sets the amount of damages suffered by the Altai company at 100,000 francs, and orders the C.A. company to pay the Altai company the amount of 100,000 francs in damages.

On the petition that the C.A. company be ordered to pay a civil penalty

When the C.A. company brought suit against the Altai and Faster companies, the result of the United States case was not known. Therefore, it cannot be maintained that the C.A. company brought an improper suit with respect to the Altai company, and its distributor, the Faster company, since OSCAR 3.4 was found to be an infringement of ADAPTER.

Therefore the Court rejects the claim of the Altai company.

On provisional enforcement

Since the Court finds that it is necessary and compatible with the nature of the case, provisional enforcement is ordered, in application of article 515 of the New Code of Civil Procedure.

On Article 700 of the New Code of Civil Procedure

The C.A. company involved the Altai company in lengthy proceedings, requiring the Altai and Faster companies to incur expenses, not covered in proceedings costs, in order to pursue legal recourse. The Court finds that it has sufficient documentation to establish the amount due by Plaintiffs in the amount of 50,000 francs. The costs of the experts will remain the responsibility of Plaintiffs.

WHEREFORE

The Court, after due deliberation, and sitting publicly in judgment after hearing from both parties in the first instance,

Declares that it is does have jurisdiction;

Rejects the demurrers raised by the Altai company;

Finds the main petition of the Computer Associates International company and the Agence pour la Protection des Programmes [The Program Protection Agency] admissible, but finds that their petition is unfounded, and rejects the claim;

States that the OSCAR 3.5 program is not an infringing version of the ADAPTER program;

Finds the counterclaim of the Altai Software company admissible, and grants it in part;

Orders the Computer Associates International company to pay the Altai Software company the amount of 100,000 francs in damages;

Rejects as inoperative or unfounded all other broader or contradictory arguments, and rejects all such claims of the respective parties;

Orders provisional enforcement;

Orders the Computer Associates International company to pay the Altai software company the amount of 50,000 francs, by virtue of article 700 of the New Code of Civil Procedure;

Orders that the court-appointed expert's expenses remain the responsibility of Computer Associates International;

Orders the Computer Associates International company and the Agence pour la Protection des Programmes [Program Protection Agency] jointly to pay the costs;

Sets the amount of costs to be received by the Clerk in the amount of 430 francs, all taxes included.

The Clerk of the Court

/signature/

For the Presiding Judge,

who is unable to attend
/signature/

TRIBUNAL DE COMMERCE
BOBIGNY
JUGEMENT DU 20 JANVIER 1995

CHAMBRE: 7 N° MINUTE: 519/95

N° Répertoire
2131/90

Société
COMPUTER ASSOCIATES INTERNA
Contre

S.A.R.L.
FASTER

DEMANDEUR

- La Société COMPUTER ASSOCIATES INTERNATIONAL
711 Stewart Avenue,
Garden 11530 City New York

Représenté par Maître(s) LENOIR PIERRE, (E0957)
avocat(s) au barreau de PARIS
89 AVENUE KLEBER, 75116 PARIS, ASS D1167
et Maître CAMPANA BARBOU MARTINEZ (P0112)

- AGENCE POUR LA PROTECTION DES PROGRAMMES, 119 RUE DE FLANDRE
75019 PARIS

Représenté par Maître(s) LENOIR PIERRE, (E0957)
avocat(s) au barreau de PARIS
89 AVENUE KLEBER 75116 PARIS ASS D1167
et Maître CAMPANA BARBOU MARTINEZ (P0112)

DEFENDEUR

- La S.A.R.L. FASTER
RUE DES CHARDONNERETS
93290 TREMBLAY LES GONESSE

Représenté par Maître(s)
GOURDAIN PASCAL, (D1205)
avocat(s) au barreau de PARIS
10 RUE DE CASTIGLIONE 75001 PARIS,
et Maître ALAIN GENOT (PC172)

- La Société ALTAI SOFTWARE
624 SIX FLAGS DRIVE
SUITE 150
76011 ARLINGTON TEXAS

Représenté par Maître(s) DOT,
et Maître MONTA (ADM. DEPOIX-ROBAIN)
(D1721)

INTERVENANT FORCE

- Monsieur JACQUES MOYRAND
MANDATAIRE LIQUIDATEUR DE LA SOCIÉTÉ
FASTER
22 AVENUE DE LA DIVISION LECLERC
93000 BOBIGNY,

Représenté par Maître(s) GOURDAIN PASCAL, (D1205)
10 RUE DE CASTIGLIONE 75001 PARIS,
et Maître ALAIN GENOT (PC172)

COMPOSITION DU TRIBUNAL

Lors des débats :

Monsieur MILLOT, JUGE RAPPORTEUR

DEBATS

Audience publique du 25/11/94 devant le juge rapporteur désigné par la formation de jugement.

JUGEMENT

Décision contradictoire, en premier ressort, prononcée publiquement par
MR. BILHOL, Juge
MR MILLOT, Juge, MME CAYLA, Juge,
Mr AUTEF, Juge, MR DANGU, Juge, assistés de Mlle BOYEZ C., Commis assermenté,
délibérée par MR BRANDEL, Juge
MR MILLOT, Juge, MR CHARRIN, Juge MR TAYLOR, Juge MME CAYLA, Juge.

R.G. N° 2131/90

JUGEMENT

RÉSUMÉ DES FAITS

La société COMPUTER ASSOCIATES INTERNATIONAL, ci-après la société C.A., société de droit américain, a dévelopé aux ETATS UNITS un logiciel nommé C.A. SCHEDULER.

Ce logiciel fait partie d'une catégorie de logiciels habituellement désignés par les professionnels comme "jobs scheduler", expression que l'on pourrait traduire par planificateur de travaux.

Ces logiciels sont utilisés dans les centres de traitement de travaux informatiques pour, gérer, optimiser, contrôler, le flux des travaux informatiques à exécuter en référence aux caractéristiques spécifiques du système informatique (marque, logiciels utilisés par le centre informatique).

Les fonctionnalités de ces programmes résultent donc de la prise en compte des exigences de l'utilisateur relatives à l'organisation de l'exploitation de ses propres programmes, (par example programme de gestion de ses commandes, programme de gestion de ses stocks, sa facturation, sa comptabilité etc..) et de la nécessité de mettre en œuvre les ressources du système informatique qu'il a acquis, à travers un système d'exploitation des ressources, spécifique au constructeur du matériel en place dans le centre informatique considéré.

La structure d'un job scheduler est donc très souvent constituée d'une part, de modules de programmes capables de prendre en compte des fonctions de gestion des travaux rencontrés dans tout centre informatique, et ce, indépendamment du type ou de la marque de matériel utilisés par le centre informatique, et d'autre part de modules capables

de donner des ordres au système d'exploitation des ressources, spécifique d'un matériel de marque et de type donné.

Le module de programme capable d'organiser le dialogue, "d'interfacer", entre les fonctionnalités organisationnelles du programme de gestion du centre informatique et les fonctionnalités des systèmes d'exploitation des ressources du matériel, en l'espèce I.B.M. MVS et VSE, est nommé ADAPTER par la société C.A.

Autrement dit, CA-SCHEDULER, est constitué d'un premier élément chargé uniquement d'assurer la prise en charge des fonctionnalités retenues pour assurer la gestion des applications d'un centre informatique, ce sont les fonctions retenues pour le planificateur de travaux; et d'un deuxième élément chargé de traduire pour un système d'exploitation donné des ressources d'un système donné, (en l'occurrence MVS ou VSE) les demandes d'utilisation de ressources émises par le premier élément.

En langage d'informaticien, le premier élément émet des "appels système", (appel à des fonctions assurées par le système d'exploitation), appels qui sont traduits par le module ADAPTER pour être compris du système d'exploitation spécifique au matériel du centre informatique. Le logiciel ADAPTER joue le rôle d'adaptateur d'interface entre les paramètres émis par la fonction planificateur, le premier élément, et les paramètres de fonctionnement du système d'exploitation spécifique au système informatique sur lequel le job scheduler sera exécuté.

Le bénéfice fonctionnel d'un tel module pour un développeur de logiciel est que seul le module de type ADAPTER doit être reprogrammé lorsque l'on veut adapter un programme donné de planification des travaux, déjà développé, a un système informatique en provenance d'un constructeur quelconque.

La société de droit américain ALTAI SOFTWARE, ci après la société ALTAI, a développé, également aux ETATS UNIS, trois logiciels nommés, "ZEKE", "ZACK" et "ZEBB" assurant des fonctions de jobs scheduler susceptibles de

fonctionner sur des systèmes I.B.M. pilotés par les systèmes d'exploitation MVS et VSE.

La société ALTAI a donc dû développer un module de programme analogue au programme ADAPTER de la société C.A., capable de traduire pour les systèmes d'exploitation MVS ou VSE gérant les resources des systèmes I.B.M., les ordres résultants de l'exécution des fonctions de gestion d'un centre informatique qu'elle a retenues. Ce produit existe sous deux versions nommées OSCAR 3.4 et OSCAR 3.5 par la société ALTAI.

Or, la version OSCAR 3.4 a été développée chez ALTAI par un programmeur en provenance de la société C.A.

Après l'ouverture d'une instance en contrefaçon introduite par la société C.A. aux ETATS UNIS en août 1988, la société ALTAI a procédé à la réécriture des 30% du programme OSCAR 3.4 "importés" par le programmeur transfuge de la société C.A., le résultat de ce travail de reprogrammation a donné la version OSCAR 3.5. La version OSCAR 3.4 a été remplacée en clientèle par la version OSCAR 3.5, et la version OSCAR 3.4 retirée du catalogue de la société ALTAI.

Le 9/8/1991 un Tribunal new-yorkais a condamné la société ALTAI pour contrefaçon quant à la version OSCAR 3.4 et débouté la société C.A. de sa demande relative à OSCAR 3.5, estimant que cette version réécrite par la société ALTAI ne présentait pas de similitudes substantielles avec ADAPTER et ne violait pas le copyright de la société C.A.

Antérieurement à la décision américaine du 9/8/1991, le 22/1/1990, la société C.A. sollicitait du Tribunal de Grande Instance de Bobigny une ordonnance de saisie contrefaçon à l'encontre de la société FASTER qui distribuait en France les produits nommés "ZEKE", "ZACK" et "ZEBB"pour le compte de la société ALTAI.

Par ordonnance du 23/1/1990 le Tribunal de Grande Instance de Bobigny ordonnait la saisie réelle des bandes magnétiques contenant les enregistrements des logiciels "ZEKE", "ZACK" et "ZEBB", incluant le module OSCAR 3.5. Ces bandes ont été saisies dans les locaux de la société FASTER le 2/2/1990.

Par ordonnance du 23/4/1990, la Cour d'appel de Paris a ordonné la mainlevée de la saisie réelle sur justification d'une garantie bancaire à hauteur de 5 millions de Francs.

PROCEDURE

C'est dans ces circonstances que par acte d'huissier de justice en date du 15/02/1990, la société C.A. et l'AGENCE POUR LA PROTECTION DES PROGRAMMES, ci après l'APP, assignent la société ALTAI et la société FASTER, et demandent à ce Tribunal de:

> Recevoir la société C.A. et l'APP en leurs demandes et les dire bien fondées: Dire et juger bonne et valable la saisie contrefaçon effectuée le 2 Février 1990 dans les locaux de la Société FASTER. La valider.
>
> Dire et Juger que les Sociétés FASTER et la société ALTAI ont commis des actes constitutifs de contrefaçon des programmes dont la Société COMPUTER ASSOCIATES INTERNATIONAL INC. est titulaire dans les termes des lois du 11 mars 1957 et du 3 juillet 1985, et particulièrement du sous programme ADAPTER.
>
> Ordonner la cessation immédiate de tout acte constitutif de reproduction et/ou de commercialisation et/ou d'utilisation des programmes en cause sous astreinte définitive de 200.000 Francs par infraction constatée.
>
> Nommer tel expert qu'il plaira au Tribunal désigner avec la mission d'entendre les parties et tous

sachants, de compulser tous documents utiles éventuellement dans les locaux de la Société FASTER auxquels il aura accès, de déterminer la masse contrefaisante et de recueillir tous éléments permettant au Tribunal d'apprécier le préjudice subi par la Société COMPUTER ASSOCIATES INTERNATIONAL INC. du fait de la violation de ses droits d'auteur.

Dire qu'en cas de refus ou d'empêchement, il sera procédé à la désignation d'un autre expert par ordonnance rendue sur simple requête.

Condamner dès à présent in solidum les Sociétés FASTER et la société ALTAI à verser à la Société COMPUTER ASSOCIATES INTERNATIONAL INC. la somme de 5.000.000 Francs à titre de dommages et intérêts provisionnels.

Condamner in solidum les Sociétés FASTER et la société ALTAI à payer l'Agence pour la Protection des Programmes la somme de 50.000,00 Francs en réparation de son préjudice.

Ordonner la confiscation et la remise à la Société COMPUTER ASSOCIATES INTERNATIONAL INC. de tous supports, quelque soit leur forme, sur lesquels sont enregistrés les programmes contrefaisant ainsi que toute documentation s'y rapportant.

Ordonner la publication du jugement à intervenir dans trois journaux ou revues au choix des demanderesses et aux frais des défenderesses au besoin à titre de complément de dommages et intérêts.

Ordonner vu l'urgence l'exécution provisoire de la décision à intervenir.

Condamner in solidum les Sociétés FASTER et la société ALTAI verser à chacune des demanderesses

la somme de 30.000,00 Francs au titre de l'article 700 du NCPC.

Condamner les Sociétés FASTER et la société ALTAI aux entiers dépens.

Cette affaire a été inscrite au rôle général sous le N°. 2131/90

Le 15/2/1990 la société C.A. et l'APP, ont assigné en référé la société ALTAI et la société FASTER pour que soit nommé un expert dont la mission principale était de procéder à toutes opérations visant à déterminer si les logiciels "ZEKE", "ZACK" et "ZEBB" comportaient des similitudes avec le logiciel CA-SCHEDULER et en particulier si le sous programme OSCAR comportait des similitudes avec le sous programme ADAPTER de la société C.A.

L'affaire a été appelée aux audiences des 13/3/1990 et 10/4/1990 où elle a été envoyée aux rôles des parties dans l'attente de la remise du rapport de l'expert, Monsieur François WALLON.

Par assignation en date du 12/11/1990 la société C.A. et l'APP assignent Maître MOYRAND ès qualités de mandataire liquidateur de la société FASTER désigné par jugement en date du 25/9/1990.

Cette affaire a été inscrite au rôle général sous le N°. 9490/90.

Par jugement en date du 4/6/1991 ce Tribunal pour une bonne administration de la justice a joint l'affaire No. 9490/90 et l'affaire No. 2131/90 sous ce dernier numéro.

L'expert a remis son rapport le 14/2/1991.

L'affaire a été appelée aux audiences des 4/6/1991 et 2/7/1991.

Le 2/7/1991 la société C.A. et l'APP déposent des conclusions en ouverture de rapport d'expertise et demandent au Tribunal.

d'allouer à la concluante l'entier bénéfice de leur exploit introductif d'instance, de statuer comme précédemment requis sur les dépens.

Le 2/7/1991, la formation de jugement a confié le soin d'instruire l'affaire à l'un de ses membres en qualité de juge rapporteur, conformément aux articles 861 et suivants du Nouveau Code de Procédure Civile.

Le 3/7/1991, le conseil de la société FASTER demande au Tribunal qu'il lui soit donné note de ce qu'il n'entend pas utiliser les programmes litigieux, d'autant que la poursuite de l'activité de la société FASTER n'a pas été autorisée. Il fait remarquer que le prétendu créance de dommages-intérêts demandés par la société C.A. a une origine antérieure au prononcé de la liquidation judiciaire et tombe donc sous le coup de l'article 47 de la loi du 25/1/1985 quant à la suspension des poursuites individuelles.

Le 10/9/1991, le juge rapporteur devait recevoir les parties, mais le Tribunal américain de NEW YORK ayant rendu son jugement le 9/8/1991.

A la demande de la société ALTAI en date du 30/8/1991 et en accord avec la société C.A. les parties ont souhaité le renvoi à l'audience collégiale pour étudier le dossier et échanger des conclusions

L'affaire est appelée à 7 audiences collégiales du 1/10/1991 au 10/9/1992.

Le 1/10/1991 la société ALTAI demande au Tribunal de

> Voir le Tribunal de Commerce de Bobigny se déclarer incompétent, en ce qui concerne les demandes formulées par la société COMPUTER ASSOCIATES INTERNATIONAL INC. au profit des juridictions américaines déjà saisies, Tribunal new-yorkais (Eastern District of New-York) ou sa juridiction d'appel.
>
> Subsidiairement voir le Tribunal de Commerce de Bobigny se dessaisir en ce qui concerne les demandes formulées par la société COMPUTER ASSOCIATES INTERNATIONAL INC. au profit des juridictions américaines déjà saisies, Tribunal new-yorkais (Eastern District of New-York) ou sa

juridiction d'appel, faisant droit aux exceptions de litispendance internationale ou tout au moins de connexité internationale soulevées.

Très subsidiairement voir le Tribunal de Commerce de Bobigny déclarer les demanderesses irrecovables en leurs demandes pour défaut de droits juridiquement protégeables.

Plus subsidiairement, déclarer les demanderesses mal fondées dans leur action contre la société ALTAI SOFTWARE et les voir déboutées de leurs demandes à son encontre du fait de l'absence d'acte de contrefaçon commis par la société ALTAI SOFTWARE en France, et de sa participation sans faute à l'introduction en France de logiciels dont il est allégué qu'ils sont contrefaisants.

Encore plus subsidiairement voir le Tribunal de Commerce de Bobigny rejeter les conclusions, non pertinentes, du rapport de l'Expert Monsieur WALLON, débouter les demanderesses de toutes leurs demandes, et juger la vesion 3.5 d'OSCAR non contrefaisante.

Voir le Tribunal de Commerce de Bobigny déclarer la société ALTAI SOFTWARE recevable et bien fondée en ses demandes reconventionnelles:

Condamner la société COMPUTER ASSOCIATES INTERNATIONAL INC. à verser à la société ALTAI SOFTWARE la somme de 500.000 Francs de dommages-intérêts et condamner la société COMPUTER ASSOCIATES INTERNATIONAL INC. à une amende civile de 10.000 Francs pour procédure abusive.

Voir condamner la société COMPUTER ASSOCIATES INTERNATIONAL INC. à verser la somme de 100.000 Francs à la société ALTAI SOFTWARE au titre de l'article 700 du NCPC.

Voir condamner la société COMPUTER ASSOCIATES INTERNATIONAL INC. à tous les dépens.

Le 14/5/1992 la société C.A. demande au Tribunal de

Se déclarer compétent,

Débouter la société ALTAI SOFTWARE de ses "exceptions de litispendance internationale ou tout au moins de connexité internationale soulevées";
Débouter la société ALTAI SOFTWARE de toutes ses demandes, fins et conclusions et de ses demandes reconventionnelles;
Allouer à la concluante l'entier bénéfice de ses précédentes écritures.

Le 10/9/1992 la société ALTAI dépose des conclusions de sursis à statuer dans l'attente de la décision d'exequatur du Tribunal de Grande Instance de Paris relative à l'exécution en France de la décision du 9/8/1991 du Tribunal américain.

Le 10/9/1992, la formation de jugement a confié le soin d'instruire l'affaire à l'un de ses membres en qualité de juge rapporteur, conformément aux articles 861 et suivants du Nouveau Code de Procédure Civile.

Le 1/10/1992, le juge rapporteur après avoir entendu les dernières observations des parties et leur plaidoiries, a mis l'affaire en délibéré pour un jugement prononcé le 22/10/1992, uniquement sur la demande de sursis à statuer.

Par jugement en date du 22/10/1992, le Tribunal a prononcé le sursis à statuer dans l'attente de la décision du Tribunal de Grande Instance de Paris sur la demande d'exequatur du jugement de la Cour d'Appel de NEW YORK du Second Circuit et relative à l'affaire de la société C.A. contre la société ALTAI.

L'affaire est appelée aux audiences 10/9/1992 et 22/10/1992.

La société C.A. a fait appel en référé de la décision de sursis à statuer du 22/10/1992. Par ordonnance du 29/1/1993 la Cour d'Appel de Paris a rejeté la demande de la société C.A.

Le 21/6/1993, le Tribunal de Grande Instance de Paris a déclaré exécutoire sur le territoire français la décision rendue par la Cour d'Appel des ETATS UNIS du Second Circuit le 22/6/1992, amendée le 17/12/1992 par 1 même Cour, qui a confirmé la décision du 9/8/1991 du Tribunal du District Est de NEW YORK rejetant l'action intentée par la société C.A. à l'encontre de la société ALTAI en contrefaçon du module Adapter par le sous programme OSCAR 3.5.

Par conclusion déposée à l'audience du 19/5/1994 la société C.A. demande au Tribunal de:

> Vu le jugement du Tribunal de Grande Instance de Paris du 21/6/1993 devenu définitif, Allouer aux concluants l'entier bénéfice de leurs actes introductifs d'instance dirigés à l'encontre de la société ALTAI et de Maître MOYRAND ès qualités de mandataire liquidateur de la société FASTER.

Par conclusions déposées à l'audience du 10/6/1994 la société ALTAI demande au Tribunal de

> Adjuger à la société ALTAI SOFTWARE le bénéfice de ses précédentes conclusions, modifiées pour partie;
>
> Voir le Tribunal se déclarer incompétent à l'égard d'ALTAI SOFTWARE;
>
> Voir dire et juger que la décision rendue par la Cour d'Appel de l'Etat de New York le 22 octobre 1992, exéquaturée par Ordonnance du Tribunal de Grande Instance de Paris le 21 juin 1993, constitue une fin de non-recevoir de toutes les demandes formées par Computer Associates à l'encontre de toutes les parties défenderesses.
>
> Voir le Tribunal de Commerce de Bobigny déclarer la société ALTAI SOFTWARE recevable et bien fondée en ses demandes reconventionnelles;

condamner la société COMPUTER ASSOCIATES INTERNATIONAL Inc. à verser à la société ALTAI SOFTWARE la somme de 500.000 Francs de dommages-intérêts et condamner la société COMPUTER ASSOCIATES INTERNATIONAL Inc. à une amende civile de 10.000 Francs pour procédure abusive.

Voir condamner la société COMPUTER ASSOCIATES INTERNATIONAL Inc. à verser la somme de 100.000 Francs à la société ALTAI SOFTWARE au titre de l'article 700 du Nouveau Code de Procédure Civile.

Voir condamner la société COMPUTER ASSOCIATES INTERNATIONAL Inc. à tous les dépens.

L'affaire est appelée aux audiences des 16/9/1994, 14/10/1994, et 28/10/1994.

Le 28/10/1994, la formation de jugement a confié le soin d'instruire l'affaire à l'un de ses membres en qualité de juge rapporteur, conformément aux articles 861 et suivants du Nouveau Code de Procédure Civile.

Par conclusions en date du 25/10/1994 régularisées à l'audition du juge rapporteur, la société C.A. demande au Tribunal de:

allouer aux concluants l'entier bénéfice de leurs précédentes écritures;

rejeter l'exception d'incompétence et la fin de non recevoir invoquées par la société ALTAI;

débouter la société ALTAI de toutes ses demandes fins et prétentions.

Le 25/11/1994, le juge rapporteur après avoir entendu les dernières observations des parties et leur plaidoiries, a indiqué aux parties que le Tribunal fondera sa décision sur le rapport de Mr. Wallon et sur les faits rapportés dans les décisions

américaines, puis a mis l'affaire en délibéré pour un jugement prononcé le 20/1/1995.

MOYENS DES PARTIES

A - Moyens développés par la société C.A. et l'APP.

A - 1 Sur l'exception, l'incompétence soulevée par la société ALTAI

La société C.A. conteste l'argument de la société ALTAI selon lequel toutes les demandes de la société C.A. à son encontre sont nécessairement comprises dans la demande formulée devant la juridiction new-yorkaise. Il ne s'agit que d'une pétition de principle.

La société ALTAI ne saurait se prévaloir de l'ordonnance d'attribution de compétence intervenue dans la procédure américaine, cet accord ayant une portée limitée à la procédure américaine.

A - 2 Sur la fin de non recevoir tirée de l'autorité de la chose jugée

La société C.A. s'oppose à l'argument de la société ALTAI qui prétend que la décision américaine ayant été rendue entre les mêmes parties, pour la même cause et pour le même objet, bénéficie de l'autorité de la chose jugée sur le présent litige en application de l'article 1351 du Code Civil.

Elle soutient que les parties sont différentes, que l'objet du litige concerne la protection de son logiciel au regard de la loi française alors que le litige dont était saisie la juridiction américaine a trait à la protection au regard de la loi américaine.

En application du principle de territorialité la contrefaçon sur le sol français ne peut être jugée que par application de la loi française et par un juge français.

A - 3 Sur la fin de non recevoir soulevée par la société ALTAI, tirée de l'exequatur

La société C.A. rappelle que s'il est exact que le Tribunal de Grande Instance de Paris a rendu exécutoire la décision américaine, il a précisé qu'il appartenait au seul Tribunal de Commerce de Bobigny "d'en apprécier l'incidence sur l'issue de la procédure qui lui est soumise".

A - 4 Sur la non protection en FRANCE des logiciels créés aux ETATS - UNIS

La société C.A. expose:

que l'on se place à la date de création du logiciel en cause ou au moment où le Juge statue le logiciel est protégé en FRANCE en vertu des Conventions internationales. En effet, avant le 1/3/1989 c'est la Convention Universelle qui s'applique, et après cette date c'est la Convention de Berne.
En vertu de la Convention universelle sur le droit d'auteur de Genève ratifiée par les ETATS UNIS le 16/9/1955 et de la Convention de Berne sur la protection des œuvres littéraires et artistiques ratifiée par les ETATS UNIS le 1/3/1989, cette œuvre bénéficie en FRANCE de la protection accordée par les lois françaises des 11/3/1957 et 3/7/1985.

De plus, la loi française du 3/7/1985 en son article 51 bénéficie aux auteurs étrangers sous condition de réciprocité. Or les logiciels sont protégés aux ETATS-UNIS par une loi spécifique du 12/12/1980, protection ouverte aux auteurs français.

Conformément à la loi américaine le logiciel CA-SCHEDULER a été déposé par la société C.A. au Copyright Office de Washington. Ce logiciel constitue une œuvre originale qui bénéficie de la protection de la loi américaine sur les droits d'auteur. En FRANCE le logiciel a été déposé auprès de l'APP le 25/1/1990.

A - 5 Sur les actes de contrefaçon commis en FRANCE

La société C.A. soutient que la société ALTAI ne s'est pas contenté comme elle le prétend d'avoir indirectement participé à l' introduction en FRANCE de logiciels contrefaisants; elle a importé en FRANCE de tels logiciels. Il est évident que la société FASTER n'aurait pu commettre d'acte de contrefaçon si elle n'en avait reçu les moyens de la part de la société ALTAI. Elle estime que les arguments de la société ALTAI sont empreints de mauvaise foi la plus caractérisée. A supposer que sa bonne foi soit établie, celle ci ne saurait l'exonérer des conséquences des fautes qu'elle a commises au regard de l'article 1382 du code civil.

A - 6 Sur le rapport d'expertise

La société C.A. estime que le rapport de l'expert français établit le bien fondé de ses demandes.
Elle fait remarquer que la société ALTAI a obstinément refusé de fournir les codes sources des programmes litigieux. Elle conteste l'argument de la société ALTAI selon lequel c'est le juge américain qui n'autorisait pas la fourniture des codes sources.
La société C.A. avait accepté que la communication des pièces ne lui soit pas faite, pour en conserver le caractère confidentiel, mais directement remis à l'export français. La société ALTAI n'a pas donné suite à cette proposition. Néanmoins l'expert a pu prendre connaissance des constatations faites par les experts américains, éléments qui lui ont permis de répondre aux questions posées par le Tribunal de Commerce de Bobigny et de conclure à l'existence d'une contrefaçon.
En particulier, il est établi que M. WILLIAMS Président de la division software de la société ALTAI est un ancien employé de la société C.A., et qu'à ce titre il a pu avoir accès au code source du programme ADAPTER. De même la société ALTAI a bénéficié des services de son employé, M. ARNEY, transfuge de

la société C.A. qui a reconnu avoir emporté les codes sources d'ADAPTER.

Les rapports d'expertises américains établissent que la version 3.4 de OSCAR est une contrefaçon du sous programme ADAPTER.

La société ALTAI a ainsi été amenée à élaborer une nouvelle version du sous programme OSCAR, la version OSCAR 3.5, pour laquelle l'expert français conclut à la contrefaçon du sous programme ADAPTER. En effet l'expert conclut que les modalités de la réécriture du sous programme OSCAR 3.5 n'ont pas respecté les règles du "clonage" habituellement admises dans la profession. La société C.A. définit un "clone" comme étant un programme informatique présentant les mêmes fonctionnalités qu'un programme original.

L'expert indique que OSCAR 3.5 apparaît sur le plan technique comme dérivant directement sans apport créatif d'OSCAR 3.4 lui même copié, en partie servilement du logiciel ADAPTER de la société C.A. Il ajoute que OSCAR 3.5 conserve la même architecture que ADAPTER parce que au lieu de repartir de zéro, comme elle aurait dû le faire, la société ALTAI a réécrit OSCAR 3.5 en reprenant l'architecture et le découpage d'OSCAR 3.4.

B - Moyens développés par la société ALTAI

B – 1 Sur l'exception d'incompétence

La société ALTAI expose que la société C.A. omet délibérément de s'expliquer sur le fait que dans le cadre de la procédure américaine les parties avaient expressément décidé d'attribuer compétence pour le litige en cours et ses développements à venir au Tribunal de New-York et ce par ordonnance du 10/3/1989. Néanmoins, la société ALTAI limite sa demande d'exception d'incompétence aux demandes formulées par la société C.A. à son encontre, et non celles formulées à l'encontre de la société FASTER.

Elle fonde sa demande sur la duplication que représente cette instance avec les demandes formulées dans l'instance américaine.

En effet la société C.A. sollicitait l'interdiction de distribuer les logiciels contenant OSCAR 3.5 hors des ETATS UNIS et sollicitait des dommages-intérêts à hauteur de l'intégralité du chiffre d'affaire réalisé par la société ALTAI avec ses distributeurs étrangers.
La société ALTAI n'a jamais été présente en FRANCE, et pour qu'il y ait distribution d'œuvres contrefaisantes en FRANCE, encore eut il fallu que ses œuvres aient été déclarées contrefaisantes, ici n'a pas été le cas.

B - 2 Sur la fin de non recevoir tirée de l'autorité de la chose jugée

La société ALTAI soutient que la décision américaine dont l'exequatur a été obtenue est bien rendue entre les mêmes parties, pour la même cause et avec le même objet qu'en ce qui concerne la procédure française.

a) mêmes parties

Elle soutient que la société FASTER n'a pas la qualité de défenseur réel et sérieux dans la mesure où étant en liquidation judiciaire sans poursuite d'activité, toutes mesures d'interdiction est sans objet et toute demande de dommages-intérêts est vouée à l'échec, la procédure collective entraînant de plein droit la cessation des poursuites individuelles.

b) même cause

Elle est évidente puisqu'il s'agit d'une tentative de la société C.A. pour obtenir une décision reconnaissant que OSCAR 3.5 est une contrefaçon de ADAPTER.

c) même objet

Elle produit un document d'origine C.A. où l'on peut lire que la société C.A. reconnaît que ses demandes formulées en FRANCE sont

"virtuellement identiques à celles de l'action intentée aux ETATS UNIS".
Par ailleurs l'objet de la procédure américaine était bien d'obtenir la condamnation de la société ALTAI sur un plan mondial et d'obtenir des dommages intérêts à hauteur de l'intégralité du chiffre d'affaires réalisé par la société ALTAI avec ses distributeurs étrangers, donc de la société FASTER en particulier.
Elle souligne que s'il est exact que la société C.A. a aussi assigné en FRANCE la société FASTER, il est difficilement concevable d'imaginer que la société FASTER soit condamnée pour contrefaçon alors que la justice américaine a reconnu que la société ALTAI n'a commis aucun acte de contrefaçon en concevant, exportant un logiciel depuis les ETATS UNIS d'autant que en matière de contrefaçon de logiciels, les droits américain et français sont équivalents.

Il en résulte que l'autorité de la chose jugée porte sur l'intégratité de ce qui a été décidé par le juge américain.

La décision d'exequatur a force exécutoire en FRANCE, il s'en suit que la décision américaine interdit à la société C.A. de prétendre devant le juge français que le logiciel OSCAR 3.5 est une contrefaçon du logiciel ADAPTER.

B-3 Sur la fin de non recevoir tirée de l'exequatur

La société ALTAI soutient que, en matière de contrefacon le droit américain et le droit français sont équivalents. Elle s'appule sur la loi du 10/5/1994 pour qui "les idées, les principes qui sont à la base de quelque élément que ce soit d'un programme d'ordinateur y compris ceux qui sont à la base de ses interfaces, ne sont pas protégés par les droits d'auteur".

Elle rappelle également une décision de la Cour de Cassation pour qui le droit d'auteur ne s'étend pas aux éléments "qui résultent d'une logique automatique et contraignante".
Les principes appliqués par le juge américain sont donc similaires à ceux appliqués en droit français.
Elle soutient que le but de la procédure d'exequatur n'est pas d'exécuter la décision américaine sur le territoire français, mais d'obtenir la reconnaissance de son caractère incontestable devant les tribunaux français.
Les décisions ayant autorité de la chose jugée possèdent une opposabilité absolue à l'égard des tiers.

B-4 Sur la non protection en FRANCE des logiciels créés aux ETATS-UNIS

La société ALTAI dit que le logiciel ADAPTER n'était pas protégé par la Convention de Berne, car la société ALTAI a envoyé les logiciels contenant OSCAR 3.5 le 10/1/1989 alors que les ETATS UNIS ont signé la Convention de Beme le 1/3/1989.

De même la Convention Universelle de Genève n'est pas applicable car elle concerne la reproduction sous forme matérielle et la mise à disposition du public d'exemplaires de l'oeuvre permettant de la lire et d'en prendre connaissance visuellement.
Les logiciels n'étant évidemment pas publiables au sens de la Convention, ceux ci ne sont pas concernés par la Convention Universelle de Genève.
Il en résulte qu'au moment où la société ALTAI est supposée avoir participé à un acte de contrefaçon, la société C.A. ne jouissait d'aucun droit protégeable en FRANCE.

B-5 Sur les actes de contrefaçon commis en FRANCE

La société ALTAI expose que le logiciel incriminé OSCAR 3.5 a entièrement été conçu aux ETATS UNIS par la société ALTAI. Elle n'a donc commis aucun acte sur le territoire français puisque la société ALTAI s'est limitée a exporter ce logiciel.

B-6 Sur le rapport d'expertise

La société ALTAI rappelle qu'elle n'a pas remis les codes sources à l'expert français car le juge américain, par ordonnance du 9/12/1988 avait interdit de divulguer aux parties les pièces confidentielles versées aux débats. Cette décision justifiée par l'état de concurrence des sociétés en la cause américaine, a été confinnée lors du jugement du 9/8/1991, en réponse à une requête de la société C.A. visant à modifier l'ordonnance du 9/12/1988.
Puisqu'il est acquis qu'il n'y a aucune identité des codes sources des modules ADAPTER et OSCAR 3.5, on peut légitimement se demander ce qu'une comparaison des codes sources aurait pu apporter.

La société ALTAI souligne que l'expert français a prétendu parvenir à des conclusions en fondant son interprétation sur quelques éléments épars de la procédure américaine alors que la procédure française; article 232 du N.C.P.C., il avait l'obligation de procéder à des constatations personnelles.
L'expert a reconnu qu'il n'avait pu apprécier les similitudes ou les identités fonctionnelles entre ADAPTER et OSCAR 3.5. Il s'est cru autorisé à parvenir à une conclusion en s'attachant à critiquer la méthode suivie par la société ALTAI et non le résultat auquel cette société est parvenue, contrairement à l'approche du juge américain dont l'attention s'est portée plus sur le résultat de la réécriture que sur le processus de réécriture lui même.
Alors que pour l'expert français il n'est pas douteux que le

développement de OSCAR 3.5 a été réalisé à partir du découpage en modules d'OSCAR 3.4, l'expert américain émet l'hypothèse que l'ensemble des fonctionnalités et l'organisation des modules pourrait dériver des services requis par le scheduler dé la société ALTAI. La Cour d'Appel du Second Circuit a affirmé que l'ensemble des fonctionnalités du programme était dicté par la nature des programmes avec lesquels OSCAR devait interagir, et par conséquent que cet aspect de la struoture des modules ADAPTER et OSCAR n'était pas protégée.

La société ALTAI fait remarquer que ce que Mr. Wallon présente comme des règles de la profession en matière de développement de clone, n'est pas reconnue en particulier par Mr. Augendre, expert en informatique agréé près la Cour de Cassation.

La société ALTAI considère donc que les conclusions de Mr. Wallon ne sont pas pertinentes.

DISCUSSION

1. Sur l'exeption d'incomptétence soulevée par la société ALTAI

Sur sa recevabilité

L'exception d'incompétence étant soulevé avant toute défense au fond, lo Tribunal la déclarera recevable

Sur son mérite

La société C.A., société de droit américain, et l'Agence pour la Protection de Programmes, association régit par la loi de 1901, ont assigné la société ALTAI société de droit américain et la société FASTER société à responsabilité limitée de droit français, implantée à Tremblay les Gonnasse en Seine Saint Denis pour examiner si le produit ORCAR 3.5 développé aux ETATS UNIS par la société ALTAI, et distribué par la société FASTER, est une contrefaçon de ADAPTER, produit développé par la société C.A.

Le Tribunal estime devoir répondre à la demande particulière de l'APP à l'encontre de la société FASTER, tous les deux organismes de droit français non parties à la cause jugée aux ETATS UNIS, et, ne trouvant aucun motif d'exception relatif au lieu ou à la matière de l'instance engagée, se déclarera compétent.

2. Sur la fin de non recevoir tirée de l'autorité de la chose jugée soulevée par la société ALTAI

Aux termes de l'article 1351 du Code Civil l'autorité de la chose jugée n'a lieu qu'à l'égard de ce qui a fait l'objet du jugement que si:

> la chose demandée est la même,
> la demande est fondée sur la même cause,
> la demande est entre les mêmes parties, et
> formée par elles ot contre elles en la même
> qualité.

Le Tribunal dira que l'ensemble de ces conditions ne sont évidemment pas simultanément réunies en l'espèce, ne serait que par la présence dans l'instance de l'APP et de la société FASTER, il déboutera donc la société ALTAI de sa demande de ce chef.

3. Sur la fin de on recevoir tirée de l'exequatur soulevée par la société ALTAI

Le Tribunal de Grande Instance de Paris précise dans ses attendus:

> "Il convient de rendre exécutoire en FRANCE cette décision pour que la société ALTAI puisse utilement la verser aux débats dans le litigo l'opposant à la société C.A. devant le Tribunal de Commerce de Bobigny auquel il appartient seul d'en apprécier l'incidence sur l'issue de la procédure qui lui est soumise".

Dans le cadre de cette liberté d'appréciation, compte tenu du fait que les parties en cause sont différentes, dont l'APP et la société FASTER toutes les deux de droit français, que la décision américaine a été prise en référence au droit américain qui, même s'il est proche du droit français en matière de protection des œuvres littéraires et artistiques, ne peut être totalement et immédiatement identifié au droit français indépendamment d'une analyse des faits au regard de celui ci. La jurisprudence en matière de protection des logiciels étant évolutive, comme le prouve la décision américaine, chaque cas devant être considéré spécifiquement,

le Tribunal rejettera donc la fin de non recevoir soulevée par la société ALTAI tirée du jugement d'exequatur.

4. Sur la non protection en FRANCE des logiciels créés aux ETATS UNIS invoquée par la société ALTAI

Concernant en particulier la non applicabilité de la Convention de Berne, la société ALTAI, pour étayer son argumentation, produit un document d'exportation en date du 10/1/1989, antérieure au 1/3/1989 date de signature par les ETATS UNIS de la Convention de Berne.
Le Tribunal note que ce document concerne 4 manuels et 4 bandes magnétiques alors que la saisie réelle réalisée dans les locaux de la société FASTER concernait 5 bandes magnétiques et 8 manuels.
Le Tribunal dira donc que la société ALTAI n'apporte pas la preuve que ses exportations soient toutes antérieures à la date de la signature de la Convention de Berne par les ETATS UNIS, d'autant que tout logiciel fait fréquemment l'object de mise à jour sous forme de "release" successives destinées a corriger certains "bugs", et dira que les logiciels exportés par la société ALTAI bénéficient, en réciprocité, de la protection apportée par la loi française au titre de la propriété littéraire et artistique.

5. Sur les actes de contrefaçon commis en FRANCE par la société ALTAI

La société ALTAI s'appuyant sur le fait que le logiciel OSCAR 3.5 a été entièrement conçu et réalisé aux ETATS UNIS, reconnu non contrefaisant par le juge américain et, n'ayant qu'exporté son logiciel, elle ne peut être recherchée en FRANCE.

Cette argumentation ne sera pas retenue par le Tribunal car elle présuppose une identité absolue entre la loi française et

la loi américaine quant à l'appréciation d'une éventuelle contrefaçon lors de la distribution simultanée en FRANCE des produits litigieux. Quelques soient les convergences indéniables des droits relatifs à la protection dans les deux pays, cette identité alléquée ne peut être retenue.

6. Sur le rapport d'expertise

Il convient de noter en préalable que le rapport de Mr Wallon, l'expert français a été établi en absence de code source alors que les experts américains, le Docteur Charles POPPER pour la société C.A., Monsieur ALLISON pour la société ALTAI, ainsi que Monsieur DAVIS expert désigné par le juge américain en ont disposé.
Mr Wallon n'a pas non plus pu disposer des informations complémentaires résultant des longs débats s'étalant sur plusieurs jours auxquels a donné lieu le procès américain. Pour établir son rapport, déposé le 14/2/1991 Mr Wallon n'a donc pu bénéficier des mêmes éléments techniques que ceux qui sont invoqués dans la décision new-yorkaise du 9/8/1991 près de 6 mois plus tard.

Mr Wallon fonde sa décision, à savoir que:

"la version OSCAR 3.5 apparaît sur le plan technique comme dérivant directement, sans apport créatif d'OSCAR 3.4 lui même copié en parties servilement d'ADAPTER" sur les éléments suivants:

1) Il n'est pas douteux que le développement d'OSCAR 3.5 a été réalisé à partir du découpage en module d'OSCAR 3.4 et des fonctionnalité de ces modules.

2) Une petite partie du code d'OSCAR 3.5 a été réécrite (6.700 lignes sur 36.000 lignes) et modifiée pour respecter dans la forme, le droit et la jurisprudence aux ETATS UNIS.

3) Il n'a été trouvé aucune preuve formelle qu'OSCAR 3.5 résulte d'un maquillage d'OSCAR 3.4

4) Il ne fait aucun doute que la société ALTAI n'a pas respecté les règles reconnues par les professionnels pour développer OSCAR 3.5

Sur le point 1:

Le Tribunal note que le Tribunal américain précise que:

Les identités qui apparaissent entre les listes de fonctionnalité demandées à ADAPTER et OSCAR 3.5 étaient une conséquence des impératifs découlant du système d'exploitation et du programme d'application auquel celui ci devait être lié par l'intermédiaire d'ADAPTER ou d'OSCAR 3.5.
Le juge américain dans son analyse n'a accordé aucune valeur aux similitudes existant entre les organigrammes des deux programmes parce que ces organigrammes étaient extrêmement simples et évidents pour quiconque est coutumier du mode de fonctionnement des programmes de ce type.

Il est évident que le poids des techniques de programmation apprises par tout programmeur émerge d'autant plus qu'il s'agit de programmes de type service et de faible importance.

Le Tribunal dira donc que l'identité de structure entre ADAPTER et OSCAR 3.5 ne peut fonder une contrefaçon.

sur le point 2

Le Tribunal remarque que M. DAVIS précise dans son rapport que:

> Après la révision effectuée par la société ALTAI en développant OSCAR 3.5, il ne restait virtuellement aucune ligne de codes identiques à celle d'ADAPTER. en ce qui concerne les listes de paramètres et les macros s'il y avait des signes laissant à penser qu'il y avait eu copie, dans le même temps, il y avait des signes indiquant que la plupart des paramètres sinon tous, étaient imposés par les fonctionnalités du programme.

Le Tribunal dira que l'analyse des lignes de programme ne permet pas de fonder une contrefaçon entre ADAPTER et OSCAR 3.5

sur le point 4

Mr Wallon précise dans son rapport la méthode à utiliser lorsque l'on désire réaliser un "clone" de programme.

Mr Wallon définit un clone comme étant, au sens informatique:

> un programme dont les fonctionnalités sont strictement identiques à son modèle auquel il peut parfaitement se substituer.

Le Tribunal notera qu'OSCAR 3.5 ne constitue pas selon cette définition un clone de ADAPTER, ces deux programmes recevant en entrée des informations en provenance de programmes différents, a savoir, le module de planification de

travaux de OSCAR 3.5 pour le premier, et le module de planification de ADAPTER pour le second.

Il n'est pas contesté que ces deux programmes de planification ne sont pas des contrefaçons l'un de l'autre, même s'il sont très proches en termes de fonctionnalités, celles ci étant dictées par le mode de traitement des flux de travaux dans un centre informatique.
Deux chaînes de productions d'automobiles présentent obligatoirement de fortes ressemblances dictées par la logique de traitement du problème.
Si il est tout à fait possible que Mr. WILLIAMS ait eu connaissance de OSCAR 3.4, il est établi à travers l'analyse des documents américains, que sa fonction à la société ALTAI est une fonction de management sans incidence sur la programmation de OSCAR 3.5
Il est admis par ailleurs, comme base de la décision américaine, qu'aucun des programmeurs ayant réalisé le module OSCAR 3.5 n'avait été impliqué dans la mise au point ou l'amélioration d'OSCAR 3.4, l'accès à OSCAR 3.4 étant refusé aux programmeurs d'OSCAR 3.5.
Il faut remarquer qu'il était du plus haut intérêt pour la société ALTAI, au moment où elle faisait l'object d'une instance en contrefaçon sur OSCAR 3.4, origine de la reprogrammation de OSCAR 3.5, de ne pas mettre en œuvre une méthode qui ne soit irréprochable, d'autant que le niveau des experts impliqués dans la procédure aurait permis de débusquer toute tentative de simple maquillage.

Il ne paraît pas possible dans ces conditions de conclure à la contrefaçon comme découlant du non respect de la méthode de clonage habituellement pratiquée, le résultat du travail effectué par les programmeurs devant avoir priorité sur l'aspect méthodologique, qui en dernière analyse, ne peut être considéré comme déterminant à lui seul.

En conséquence, le Tribunal ne retenant aucun des points précédents, ne retiendra pas la conclusion de Mr Wallon concernant la reconnaissance de la contrefaçon.

7. Sur la contrefaçon

Pour apprécier la contrefaçon au regard de la loi française, il convient de noter que la notion d'originalité d'une œuvre, en particulier d'un logiciel, ne peut s'entendre que de manière subjective, comme l'empreinte de la personnalité du créateur. Cette empreinte étant à découvrir à partir des choix possibles qui lui sont offerts.
L'originalité doit se percevoir au travers de la marque d'un apport intellectuel impliquant un seuil minimum de créativité, un apport de nouveauté allant au delà de la mise en œuvre d'une logique automatique et contraignante.
Avant d'aborder l'analyse au fond pour apprécier l'existence ou non d'une contrefaçon il y a lieu de faire quelques remarques préliminaires:
OSCAR 3.5 est un programme de service de dimension modeste puisqu'il est reconnu qu'il a entraîné 6 mois de développement.
Sa fonction première est de mettre en relation la module programme de planification des travaux d'un centre informatique avec le module système d'exploitation.
Il reçoit en entrée les paramètres émis par le module de planification pour émettre en sortie des ordres adaptés au système d'exploitation, c'est à dire selon l'interface imposé par ce système.
L'interface programme de planification / OSCAR 3.5 induit dans OSCAR 3.5 un effet structurant sur les fonctions à programmer pour répondre aux attentes du programme planificateur des travaux.
Réciproquement l'interface système d'exploitation / OSCAR 3.5 induit un effet structurant sur les fonctions à assurer par OSCAR 3.5 pour répondre aux attentes du système d'exploitation.
Ces deux effets structurants conjugués laissent d'autant moins de liberté au programmeur que les deux fonctions de planification ne peuvent que présenter de grandes analogies et que le programme est de type service et peu important.

Il en résulte que:

l'originalité des programmes "ZEKE", "ZACK" et "ZEBB" est concentrée dans le module de planification des travaux, module qui ne fait pas l'objet d'une recherche en contrefaçon. Le module OSCAR 3.5 est "coincé" entre l'interface généré par les programmes de planification de "ZEKE", "ZACK" et "ZEBB" et l'interface défini par I.B.M. permettant l'accès au système d'exploitation.

Ces deux interfaces génèrent une logique contraignante qui se manifeste dans l'organisation du programme, qui justifie le fait que le juge américain n'a pas attaché d'importance

> "aux similitudes existant entre les organigrammes des deux programmes parce que ces organigrammes étaient extrêmement simples et évident pour quiconque est coutumier du mode de fonctionnement des programmes de ce type."

Les programmes de types ADAPTER ou OSCAR 3.5 font partie des programmes de service, réalisés dans toutes les sociétés, pour tout programme devant fonctionner avec le système d'exploitation MVS ou VSE, les techniques de programmation communes aux programmeurs aidant, il n'est pas anormal de trouver un certain niveau de similitude entre deux modules de service au niveau de l'organisation du programme voir par le recours aux mêmes types de macros.

En conclusion:

les codes sources analysés par les experts américains étant réputés différents,
l'architecture et l'organisation des programmes présentant des similitudes dictées par des logiques contraignantes,
les interfaces n'étant pas protégeables.

Le Tribunal dira que OSCAR 3.5 n'est pas une contrefaçcon de ADAPTER.

Sur les dommages-intérêts sollicités par la société ALTAI et la société FASTER

Il apparaît clairement dans le procès verbal de saisie réelle des bandes magnétiques en date du 2/2/1990 dans les locaux de la société FASTER que les produit "ZEKE", "ZACK" et "ZEBB" étaient les seuls produits distribués par cette société.
La société FASTER a été mise en liquidation judiciaire le 25/9/1990. Il ne peut être soutenu que l'instance engagée par la société C.A. n'ait pas eu un effet négatif sur le niveau d'activité de la société FASTER.

Le Tribunal fixera donc souverainement à 100.000 F. le montant du préjudice subi par la société ALTAI et condamnera la société C.A. à payer à la société ALTAI une somme de 100.000 F. à titre de dommages-intérêts.

Sur la demande de condamnation de la société C.A. à une amende civile

Lorsque la société C.A. a assigné la société ALTAI et la société FASTER, le résultat de l'instance américaine n'était pas acquis. Il ne peut donc être soutenu que la société C.A. a engagé une procédure abusive à l'égard de la société ALTAI et de son distributeur la société FASTER, d'autant que la version OSCAR 3.4 a été déclarée contrefaisante de ADAPTER.

Le Tribunal déboutera donc la société ALTAI de sa demande de ce chef

Sur l'exécution provisoire

le Tribunal l'estimant nécessaire et compatible avec la nature de l'affaire, l'exécution provisoire sera ordonnée en application de l'article 515 du N.C.P.C.

Sur l'article 700 du NCPC

La société C.A. a entraîné la société ALTAI dans une longue procédure, obligeant la société ALTAI et la société FASTER à exposer des frais non compris dans les dépens pour recourir à la justice, le Tribunal dira disposer d'éléments suffisants pour fixer la somme due par les demandeurs à 50.000 F. les frais d'expertises restant à la charge des demandeurs.

PAR CES MOTIFS

Le Tribunal après en avoir délibéré, statuant publiquement par jugement contradictoire en premier ressort;

Se déclare compétent

Rejette les fins de non recevoir soulevées par la société ALTAI

Reçoit la société COMPUTER ASSOCIATES INTERNATIONAL et l'AGENCE POUR LA PROTECTION DES PROGRAMMES en leur demande principale, la dit mal fondée, les en déboute.

Dit que le programme OSCAR 3.5 n'est pas une version contrefaisante du programme ADAPTER.

Reçoit la société ALTAI SOFTWARE en sa demande reconventionnelle, y fait droit partiellement;

Condamne la société COMPUTER ASSOCIATES INTERNATIONAL à payer à la société ALTAI SOFTWARE la somme de 100.000 F. au titre des dommages-intérêts;

Rejette comme inopérantes ou mal fondées toutes autres conclusions plus amples du contraire, en déboute respectivement les parties;

Ordonne l'exécution provisoire;

Condamne la société COMPUTER ASSOCIATES INTERNATIONAL à payer à la société ALTAI SOFTWARE la somme de 50.000 F. au titre de l'article 700 du NCPC;

Laisse les frais d'expertises à la charge de la société COMPUTER ASSOCIATES INTERNATIONAL;

Condamne la société COMPUTER ASSOCIATES INTERNATIONAL et l'AGENCE POUR LA PROTECTION DES PROGRAMMES solidairement aux dépens.

Liquide les dépens à recouvrer par le Greffe à la somme de 430 Francs TTC.

/s/_____	/s/_____
Le Greffier	Pour Le Président empêché